# The Harveian Lectures

ON

# PROGNOSIS AND TREATMENT IN PULMONARY TUBERCULOSIS.

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## LECTURE II.[1]

*Delivered on Nov. 8th, 1900.*

MR. PRESIDENT AND GENTLEMEN,—In my last lecture I discussed with you how the prognosis of tuberculosis of the lungs in the first stage of its course, that of "invasion," may be judged from the physical signs and the localisation of the lesions, and I considered, also, what effect pre-existent affections might have upon the future of the patient. Let us now pass on to the indications which may be given to us by individual symptoms and complications, still confining our discussion to the "first stage." The symptoms accompanying this stage are many and all are at times important for diagnosis, but those which help us in prognosis are but few and they may be classified under the heads of Pyrexia, General Weakness, Digestive Disturbances, and Hæmoptysis. I have mentioned how the conditions previously considered require care in their estimation before one can found a prognosis upon them. But still more is this necessary in the case of symptoms. Not one of them alone is of much value, but I must point out to you how, when combined together or with the other conditions, they may be of some assistance. Pyrexia may be entirely absent, even though the temperature in a doubtful case be taken every four hours. So much, one might say, the better for the patient. So much the better, too, might we think the matter if there were but few physical signs, and those, too, limited to one particular area. But caution must be observed here. Such a state of things may be merely the result of a lack of reactionary power on the part of the general system, a lack of protective power; and if together with the conditions named there be tubercle bacilli in the sputum and extreme general weakness we can only consider the condition as very grave and indicating an unresisted attack of the bacillus. In no short time one frequently meets with a furious outbreak and rapid destruction of lung tissue.

But given bacilli in the sputum and little or no pyrexia, the local manifestation limited, but with the general strength well maintained, the prognosis is good. The indications are that the attack is not powerful, the resistance to it is good and not fully called forth. For we should, let me remind you, consider the fever as the result either of bacillary poison or, on the other hand, of inflammatory chemiotaxic reaction. It is impossible to entirely differentiate the two, but I would provisionally put it to you that the maintenance of body strength, together with the presence of localised physical signs and the lack of marked pyrexia, would indicate a healthy reaction, while, on the other hand, localised and even very limited physical signs, with lack of marked pyrexia but with great diminution of physical strength, would show a lack of resistance to the bacillus, not only on the part of the lung, but on that of the whole general system.

Yet, leaving the question of maintenance of general strength out of the discussion, one may roughly say that the higher the pyrexia the worse the prognosis in this stage, and *vice versâ*. And yet once more we must use caution, especially with neurotic patients. Such patients may show a very high temperature when there is really nothing much wrong with them, and in the absence of physical signs their condition is very confusing. Nothing but great experience can prevent the physician from being led into error in diagnosis by such a physical state, and the same error is easily made in prognosis. It happens not infrequently that tuberculosis of the lungs, like enteric fever, may have a most turbulent outbreak and very soon lapse into a very ordinary mild and tractable attack. Now, my colleague, Dr. Kingston Fowler, has shown that the only form of pyrexia which can be absolutely said to be tuberculous is that in which the morning temperature is higher than that of the evening. For the diagnosis of pulmonary and other forms of tuberculosis there cannot be any question of the value of this observation, and especially when other indications are doubtful. For prognosis too, this sign may be of use as indicating a very pronounced tuberculous poisoning. On this point even the large record of out-patient cases which I have used cannot help us, and we must appeal for facts to the in-patient department. Since taking the charge of in-patients I have paid special attention to the matter, and at present for convenience of observation the evening temperature is marked on the charts in red and the morning temperature in black. It is very remarkable, however, how very rarely in the course of a case of pure tuberculosis this sign appears. Nor is this to be wondered at when we remember the many known causes of the pyrexia. Tuberculous infection and its accompanying tissue-reaction or chemiotaxis are, in the first stage, causes of fever. Whereas later we have added to them poisoning by the staphylococcus and pneumococcus. Pyrexia due to tuberculous poison alone must necessarily be rare and not always is it of the reversed type. Therefore, it must be only seldom that the pyrexial condition can help us in prognosis. But somewhat approaching this type is a pyrexia in which the morning temperature never reaches the normal, albeit the evening temperature may be only slightly higher. Such a pyrexia, even alone as a sign, is of very unfavourable augury, and the higher the morning temperature and the nearer it approaches to the evening temperature the worse is the outlook for the patient.

In regard to the foregoing remarks it is necessary that I should say that they refer to temperatures taken in the mouth. For really scientific results one should place the thermometer in the rectum and this is done now, I believe, in most of the open-air sanatoria. But in ordinary practice there are obvious objections to this method and I have striven here to give opinions which may be made use of only in ordinary practice.

General weakness at the commencement of a tuberculous attack must manifestly be harmful, and indeed, as I have hinted above, increases greatly the gravity of other symptoms. Particularly (if one may analyse the state) must weakness of cardiac and vaso-motor action be considered a bad sign. The patients who have blue and cold extremities almost invariably do badly. Nor does this remark contradict what I have previously said as to the occasionally bad prognosis to be given to florid subjects, for often that florid appearance is a sign of vaso-motor weakness and not of a healthy circulation. This feebleness of circulation, and with it of the general system, carries with it a bad prognosis, not only because it indicates a prospective lack of resistance of the tissues to the tuberculous poison, but also because it usually interferes greatly with such valuable means of cure as over-feeding and residence in high altitudes and the open-air, valuable as at times these remedies may be in counteracting this very condition. The same must be said of digestive disturbances accompanying an attack. They interfere with the application of systematic treatment. But I should like also to say a few words about the prognosis of cases which show gastric derangement as their first symptom. It has long been known that an irritation of the pneumogastric nerve-endings in the lungs may first show itself by a reflex irritation of the endings of the same nerve in the stomach. The diagnosis of such an occurrence is often very difficult, since even for some little time the lung lesion may be so slight as to be indiscoverable on the most careful examination. But sooner or later the lung lesion does show itself, and in my experience such cases eventually do badly.

Let us now turn, however, to one of the best known of the symptoms which accompany the earlier stages of pulmonary tuberculosis—namely, hæmoptysis. This symptom is only too well known and causes far too much alarm. Yet it occurs so often in other disorders that I think one may say that hæmoptysis alone is most frequently not caused by lung disease. But given that it actually is produced by lung disease in the earlier stages,

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at least its presence does not necessarily increase the gravity of the prognosis, even though the output of blood be somewhat copious. Repeated small hæmoptyses are often a relief to an over-congested pulmonary area. But I would not say the same of repeated copious hæmoptyses; such give us evidence of severe and long-continued lung trouble and increase the gravity of the case. One single large hæmoptysis, without pyrexia and without signs of any extensive lung lesion, is of comparatively little importance, but even one large hæmoptysis together with pyrexia should cause misgiving in the physician's mind as to the future of his patient. I speak here, of course, of hæmoptysis in only the initial stage. In the later stages this complication is of much more importance. Let me also call your attention to a mode of occurrence of hæmoptysis which is often quite unnecessarily alarming. It has received very little attention. The method of treatment of early tuberculosis has invariably been one of high-feeding in some shape or form. Now, this necessity for the high feeding in time disappears as the tuberculosis disappears, and yet such patients persist in such feeding even to middle life and old age. Then hæmoptysis occurs as it would do in a non-tuberculous patient who might have been subjected to the treatment and is really a safeguard to the general vascular system. Such hæmoptyses are never accompanied by pyrexia.

So far I have dealt only with the first, or "invasion," stage of tuberculosis of the lungs, and now we come to the second stage, or that of "progress." Let me, for fear you forget, remind you of the method which we are attempting to pursue. First the attack and its called-for resistance from the tissues, and now the giving way of the tissues before the attack. The signs of such giving way need not delay us long, for they are of but little help in prognosis, however important they may be in diagnosis. They have hitherto been called signs of "softening," meaning by that (if only we took a rational view of the process going on in the lungs) a giving way of the inflammatory or chemiotaxic reaction of the tissues to the invasion of the germ. Our prognosis must depend upon the estimation of how far it is probable that the invasion will go, how far the tissues can resist it, and what the effect of the battle may be, what damage will be done to the ground and the system in general by the invader and by the requisite reaction of the invaded. I think we must now inquire how far the invader has damaged the tissue, and how much farther he is likely to go in the future, and all this hinges upon whether the general system, and with it or through it the involved tissue is likely to give way before the invading germs. Let us look at the matter first of all in the view of neighbouring extension. This is a question of physical signs, and now we must ignore many which I have mentioned as occurring in the first stage. Pleurisy is here of little importance; small râles or crepitations do certainly show extension of mischief, but what we ought to be most on the look-out for are the bubbling large râles with which we are all well acquainted. I must not here enter into their pathology at any length, but I may say that a better name for them is "echoing" râles. They echo or resound, and I cannot myself distinguish the essential mechanisms involved in the two terms, either generally or in their non-specific application. I have thought over what Helmholtz and other authorities have written on this subject and have studied how their views might affect the physical signs in question. But I cannot see that there is any difference between "echo" and "resonance," for, at any rate, our purpose; and coming to the immediate point, which is first one of diagnosis and afterwards of prognosis, I think that these râles, bubbling, resonant, echoing, metallic or consonant, as they have variously been called, are under all these names indicative of a condition of tissue in which there is softening of inflammatory products in a cavity of some certain size. This, I conceive, is the pathology of such a condition. In my experience as pathologist at the Brompton Hospital I have repeatedly found such a condition post mortem after having suspected its presence during life. The cavities are not large, they could not be diagnosed as such during life, but they were there in the site of the "echoing" râles. Sometimes they are diagnosed, really only on suspicion, as "diffused cavitation," but no one could be sure of them during life as cavities. Nevertheless, I think this form of râle is produced by the echo or resonance of a crepitation in a small cavity of the tissue and thereon depends its value in prognosis. The echoing râle means the giving way of the tissue and the prospective continuance of such action makes its prognostic value. Given, then, the existence of a lesion of the lung with all or some of the signs which we have mentioned as accompanying the first stage, the presence of the râles under discussion indicates progress of the germ and the extension of its action beyond the parts originally affected, a further invasion of at least the lung tissue, leaving out of the discussion the affection of the general system which the tubercle bacillus may hereafter invade. I have herein made an excursion into pathology but I have already told you that pathology should give us our basis for prognosis and also for treatment. A case comes before us, diagnosed by ourselves or by others as tuberculosis of the lungs in a somewhat advanced stage, meaning, thereby, that the first stage has passed. The point of our prognosis must depend upon how far can the passage of the germ proceed, without further deterioration of the lung tissue. This as regards the second stage and no more.

Here I come to the matter hinted at in my former lecture, the method of progress of tuberculous lesions in the lung. I have mentioned hitherto that I would refer to this as a matter of importance and once more I appeal to facts as offered to you in the cases which I show from my records at the Brompton Hospital. We have to consider the question of how an invasion once established in the lungs can be carried to other parts of the lungs and to other parts of the body, for in the matter of this extension rests our prognosis of the case, in the stage under discussion. It may seem at first sight only a question of pathology, but on it hinges our full diagnosis and therefore prognosis. Extension of a tuberculous lesion of the lungs may take place by means of (1) simple contiguity of tissue; (2) lymphatic absorption; (3) bronchial insufflation—a matter of the greatest importance; (4) venous conduction; and (5) arterial conduction; and while our first concern must be the condition of the lung, we must also consider how far our prognosis may be affected by extension to other parts, for it is in this stage that this extension is most important. We will take the methods in the order in which I have mentioned them.

1. *Contiguity of tissue.*—We can estimate this by the localisation of those râles which I have already discussed and not necessarily by the extension of consolidation which may or may not accompany them. The more widely spread are those râles from the point of primary infection the more extended is the tuberculous infection and therefore the more serious is the prognosis for the patient, since such an extension means that the resistance is giving way before the invasion. But it is most remarkable how the resistance is assisted by the anatomy of the lung. For a very long time the lesion, extending only by mere contiguity, remains located to one lobe of the lung. I mentioned in my last lecture, as I shall have to mention often in this, how important it is to localise the lesion in regard to the lobes of the lung and I have described how this can be done accurately. Given, then, that the lesion has extended from its original site, the prognosis is good (or at least as good as it can be) if the lesion does not pass beyond the lobe in which it took its origin. Of course, I am speaking here of the lesion itself and not of the symptoms which may accompany its progress. These may be of extreme importance and will be mentioned later. But sooner or later the limit of the lobe is passed and this is by means of the second method of extension.

2. *Lymphatic absorption.*—Undoubtedly this plays a great part in the first method. No one can doubt it who has carefully examined a section of the lung under the microscope in the later stages of croupous pneumonia. There one can see the lymphatics which surround the bronchi, and which ordinarily are almost empty spaces, to be distended with the granular débris absorbed from the alveoli. In tuberculous pneumonia that débris contains the tuberculous poison and by means of it is spread to surrounding parts the infective agent and its accompanying lung-damage. The inflammation leads to adhesion between the lobes of the lung; those adhesions include lymphatics and thus at last we have the natural barrier of the lobes broken down. We cannot hope to detect the exact moment of this occurrence but we can detect very soon any important development of the mischief. When we do so we know that another lobe of the lung has been invaded and that there is no further barrier on that side, at least, to the progress of the disease. Given, then, that the lesion has extended from one lobe to another by direct contiguity or by lymphatic absorption (and probably both methods are concerned in the process) the prognosis is bad. But mere extension of the initial

lesion, bad as it is, is not the worst which may happen to the patient by this method of extension. I have myself on a few occasions traced out similar tuberculous lesions to the bronchial glands and further. On one occasion I traced a tuberculous lesion of the abdomen by way of the receptaculum chyli through the thoracic duct and thereby to the venous circulation. The case was published some years ago under the title of Chylous Ascites by Professor Whitla of Belfast. There can be no doubt that by means of the lymphatics the tuberculous poison is spread to remote parts of the body and the possibility of such spreading increases the gravity of the prognosis in this stage of tuberculous affection of the lungs. The detection of the results of such spread is beyond our present subject, but its occurrence marks a very late stage of the disease. The general spread of the tuberculosis occurs also in other ways and must be discussed apart, though its prognosis when once it has occurred at all is usually fatal and will not detain us more than a few moments when it has to be further mentioned.

3. *Bronchial insufflation.*—The third method of extension, by bronchial insufflation, is, as regards the lungs themselves, of by far the greatest importance. Many years ago Carswell of University College described the grape-like masses of pulmonary consolidation and caseation which occur in tuberculosis of the lungs. They are figured in his own plates and also in the Atlas of Pulmonary Diseases published by the late Dr. Wilson Fox. Wilson Fox's Atlas and also his book were unfortunately delayed in publication, but like Dr. Walshe's Diseases of the Lungs they are invaluable records of accurate observations which now, even with our later ideas of pathology cannot be neglected by any searcher after facts. Carswell and also Wilson Fox did not see the significance of "Carswell's grapes," as they have been termed; but a study in the post-mortem room and a reading of Dr. Ewart's Anatomy of the Bronchi will, I think, explain their occurrence and indicate how they will help us in prognosis. These "grapes" occur usually in the lower lobe of the lung and in the middle part of that lobe. In the post-mortem room we see them in the centre of the lung and also frequently reaching to the surface. It is only when they have extended to the latter-mentioned position that they can be detected during life. Without doubt they are due to infection of the lower lobe of the lung by excretion insufflated through a bronchus, excretion which ought to be ejected, but is not, and which in the inspiratory effort which follows cough is drawn into the neighbouring bronchi and thence infects other portions of the lung. Such infection certainly may occur in the upper lobes and the pathological appearances warrant this supposition, but we cannot determine this clinically. Yet we *can* determine the presence of such a lesion in the lower lobes during life and it is of the greatest importance for our prognosis. A patient who has suffered, as we have previously determined, from tuberculosis of the upper lobe on one or other side, is found to have a lesion in the lower lobe of that or the opposite side and with the incidence of this lesion there is an increase of the pyrexia and of the general symptoms. The lesion in question will be found—care as to localisation being observed—not in the upper part of the lower lobe, where it might be due to direct extension as already mentioned, not in the lower part, where it might be a primary basic tuberculosis as described in my first lecture, but in the mid-way of the lobe and indicated by dulness and râles such as have characterised the primary lesion.

I have not been able to satisfy myself as to upon which side such an infection may be expected from a lesion of either specified apex. One would reason that it should occur on the opposite side in view of its pathogeny, yet I find from my records that its choice of side seems to vary. It was this lesion which I had in my mind when, in my first lecture, I warned you to be careful in your diagnosis of a primary basic tuberculosis. The initial lesion in the upper lobe may be very slight, almost imperceptible on the most careful examination, and the secondary lesion may appear to be very advanced. Yet the localisation of the latter in the middle part of the lower lobe should point out its character. Such a lesion shows a very important extension of the initial mischief—important as to the actual mischief done, but still more important when we consider that it is a new focus of disease, and extensible by its contiguity (through lymphatic absorption and by the the other modes soon to be mentioned), not only to the whole of the lower lobe of the lung, but to remote parts. The finding of such a lesion undoubtedly greatly increases the gravity of the prognosis. Further, I would remark that it has appeared to me that whatever may be the state of the primary lesion the secondary lesion seems to advance with the greater rapidity, possibly because the poison has been placed on soil which has previously been weakened by the general disease, and because, too, there are no barriers to the progress of the poison such as in time are formed in the primary lesion by fibrous cicatricial tissue.

The other two methods of extension are not so obvious and yet are of importance in pathology. Not, however, to so great an extent as to help us much in prognosis, though it is right that we should recognise them. In the course of a case of tuberculosis of the lungs we sometimes meet with strange and apparently unaccountable fresh outbreaks in spots remote from the initial lesion. No doubt some of these, and especially those which occur at the apex of the lungs, are really primary outbreaks, and it may be convenient here to deal with their prognosis at once. They are most serious occurrences and they mean that the disease has started afresh with all the probabilities which accompanied the first onset. But undoubtedly some such lesions are due to—

4. *Venous conduction.*—The anatomy and physiology of the lungs have not been sufficiently studied by physicians. Especially the circulation of blood through the lungs has been overlooked, and in my next lecture I shall have to show you how it can be taken advantage of in treatment. But as regards pathology let us not forget that the circulation through the lungs is twofold. The pulmonary artery carries blood to the lungs in order that the blood may be aërated, and that same blood is carried back to the left side of the heart by the pulmonary veins. But the lungs have to be nourished and this function may be carried on by the bronchial arteries which come from the aorta. The bronchial veins take the blood, which is effete from having nourished the lungs, to the right side of the heart, and the right ventricle drives this blood once more through the lungs. Now when the lung is infected by tuberculosis this effete blood is liable to be loaded with tuberculous poison from the lung and therefore once more the poison is driven through the lungs, through the pulmonary artery, and, further, may be disseminated widely—far away, possibly, from the primary focus of infection. We must argue from all this that however unfavourable may be the prognosis when secondary lesions arise in such situations as to give us reason to know that they are due to (*a*) direct extension, (*b*) lymphatic absorption, or (*c*) bronchial insufflation, yet scattered new patches due to fresh initial outbreaks or to (*d*) venous conduction are of much more serious augury.

5. *Arterial conduction.*—The last method of direct extension from the lungs, that by arterial conduction, does not essentially concern the lungs themselves but mostly the general system. It has been already spoken about in the previous section in so far as the bronchial arteries are concerned. Also we must remember, as already stated, that the blood taken from the lungs by the bronchial veins, infected probably by tuberculous poison and re-distributed to the lungs, may, with all the other blood of the pulmonary artery, pass through the lungs without further infecting them, but with the possibility of infecting other parts of the body. Thus we get, not only further infection of the lungs, but also tuberculous meningitis, tuberculosis of the kidneys and spleen, and so on. The prognosis of all these is, of course, most unfavourable.

So far I have spoken only of extension directly from the lung itself, but a most serious matter is the extension of tuberculous mischief by the excretion of the lungs after it has left the lungs themselves, and the only two points with which I intend to deal are the affections of the larynx and of the intestines, for their presence very greatly increases the gravity of the prognosis. Let it be at once dismissed from our minds that tuberculosis of the larynx is ever primary—dismissed, that is, in so far as prognosis is concerned. Tuberculous tumours of the larynx undoubtedly do occur, but they are exceedingly rare. But "phthisis of the throat," as it is called, is practically non-existent as a primary lesion. This matter has been already thoroughly threshed out and the reasons for holding such a view are very concisely given by Dr. Hilton Fagge in his "Text-book of Medicine." They may be briefly stated thus; 1. Most cases of laryngeal tuberculosis can be shown during

life to be accompanied by signs of lung mischief. 2. Always post-mortem laryngeal tuberculosis is accompanied by lung lesions. 3. Advanced lesion of the larynx may be accompanied by but slight lesion of the lungs and yet the former may be secondary and the latter primary. 4. The non-finding of lung trouble is no proof of its non-existence, for even the best observers may be deceived in this matter.

As an illustration of the latter argument I may mention a case which occurred in the out-patient department of the Brompton Hospital. A man presented himself one day who had unquestionable tuberculous ulceration of the larynx. He had also cough and all the appearances and symptoms of advanced tuberculosis of the lungs. But the most careful examination by myself and several other medical men who were attending the clinique, failed to find any but the most ambiguous physical signs in the chest. This might have been looked upon as a case of primary laryngeal tuberculosis, yet I was sure it could not be. On two other occasions, an interval of a fortnight elapsing between his visits, his chest was further examined and with the same result. But on his fourth attendance signs of cavity were found in almost every portion of the thorax. The cavities could not have formed in a fortnight. Undoubtedly they were present at his first examination but, from blocking by mucus or from some other condition, escaped detection.

Tuberculosis of the larynx is therefore always caused by infection of the larynx through the excretion of the lungs. Similarly, too, the intestines become infected from the swallowing of tuberculous sputum. I do not speak here of primary tuberculosis of the intestines, which is most common in children, but of the intestinal ulceration secondary to lung disease. That this is due to infection carried from above is shown by its localisation. It is invariably seen in its early stages near the ileo-cæcal valve. During my period of office as pathologist to the Brompton Hospital, Dr. Dodgson and Dr. Soltau Fenwick examined carefully the appendix vermiformis in all the post-mortem examinations. They always found it to be affected when other parts of the intestines were ulcerated and in a not inconsiderable number of cases they found the appendix alone to be affected. This points to the conclusion that the ulceration occurs where the swallowed secretions of the lung are allowed the longest contact with the mucous membrane of the bowel. The symptoms, of course, are those with which you are well acquainted—pain and diarrhœa, &c. The occurrence of this condition carries with it the gravest prognosis, and, indeed, nearly always introduces the fatal end.

As regards symptoms, there are only two which in this stage help us greatly in prognosis, and they are pyrexia and hæmoptysis. This, the second stage, is, unlike the first stage, never without pyrexia, and what has been said of the fever of the first stage applies also to that of the second stage, though without the limitations there mentioned; that the higher the fever, and again the more nearly the morning temperature approaches that of the evening, and the worse is the prognosis, may be taken as a general rule. But still worse is the so-called "hectic" fever, where a morning temperature below normal is followed by an evening temperature of even eight degrees higher. This is a most serious condition and all the more so because, in my experience, no drug has the slightest effect upon it.

Hæmoptysis is a much graver symptom in the second stage than in the first, and is here dangerous. This results from the fact that while the hæmoptysis may still be caused by mere congestion, yet it much more frequently is due to ulceration of a blood-vessel from so-called caseous or suppurative arteritis. The dangers of its occurrence are: (1) loss of blood, a very serious matter in an already debilitated subject; (2) shock with cardiac failure; and (3) fright. The last-mentioned danger has not often been mentioned, and yet I have seen it occur. I differentiate it from the second danger, for I have known death occur from what I could conceive must be this and no other cause when only small quantities of blood have been expectorated or found in the lung tissue after death. There are doubtless other symptoms of the second stage, such as general weakness, emaciation, profuse night-sweats, &c., which are of importance in prognosis, but they have already been mentioned in a former part of this lecture, and they can be comparatively easily controlled by treatment, therefore they do not require detailed discussion here.

The third stage of pulmonary tuberculosis I have chosen to call that of "result" and not "cavitation," as has hitherto been done, and for the reason that "cavitation" is not the only final result of the tuberculous process, though that result always means destruction of lung tissue. Cavitation is nearly always accompanied by a certain amount of fibrous thickening round the walls of the cavity, and, *cæteris paribus*, the greater the amount of fibrosis the less dangerous is the presence of the cavity. But we may get fibroid change without any appreciable cavitation, and these two conditions, "cavitation" and "fibrosis," therefore constitute two separate forms of the "result" stage, each with its own particular elements of danger, and therefore to be distinguished in prognosis.

Pursuing again our former order of discussion we will deal first with the nature of the physical signs. The percussion note obtained over a cavity is the resultant of two conditions, the cavitation and the thickening of its walls, the one causing increased resonance, the other dulness, and hence we get the high-pitched resonance of the cavernous percussion note. Given, then, that we have diagnosed the presence of a cavity by other methods (and I have elsewhere described how this should be done), then the higher pitched the resonance the greater the resistance to the finger and the more favourable is the condition. This view is based upon the idea that such a condition of signs indicates a greater amount of fibrous tissue round the cavity, which I have above stated to be a desirable state. Moreover, the presence of "echoing" râles would indicate a complication of the third by the second stage and a further progression of tuberculous action. This, of course, is an unfavourable sign, but it must not be confused with the râles of bronchiectasis which may be present in the fibroid form of this stage. The differentiation of the two does not form part of our present subject. The localisation of the signs does not help us much in this stage, except in the respect that the more limited the area affected, naturally, the more favourable must be the prognosis. Again in this stage the influence of antecedent conditions in the prognosis need not be discussed. But one class of "individual symptoms" and complications becomes of the utmost importance. Dyspnœa, especially on exertion, but also during rest, is nearly always present and is unfavourable for prognosis. Yet its pathology and its influence on the prognosis differ in the two conditions of the stage. In the condition of cavitation the dyspnœa is due almost entirely to loss of lung tissue, and although in amount it is not usually so great as in the condition of fibrosis, yet its prognosis is more unfavourable. In the condition of fibrosis some of the dyspnœa no doubt is due to loss of lung-substance, but its greater part (as I have elsewhere shown) is caused by non-expansion of the thorax over the affected areas. The expansion of the thorax is of great importance in the sucking of blood into the heart, and if interfered with the supply of venous blood to the lungs for aeration is lessened and dyspnœa must result. But such a state is not so dangerous as is great loss of lung tissue, and consequently while the dyspnœa is greater in the fibroid than in the cavernous state its prognosis is more favourable.

In the third stage the state of the circulation and with it that of the general body condition must be carefully watched, for heart-failure is one of the most serious complications. Any sign of its appearance, such as blueness and coldness of the extremities and weakness of the heart-sounds, should place the physician on his guard. Pneumothorax, again, is a formidable complication, and while principally occurring in the third stage, may at times be found in the second stage. But its danger is, I think, mostly limited to the moment of its occurrence. Then, certainly, it may cause death from shock. But when once the shock has been recovered from I do not consider the prognosis of pneumothorax in a tuberculous lung to be so unfavourable as has been so often thought. It scarcely requires treatment and often does well. Undoubtedly, like any other complication, it adds to the gravity of the condition, but lately I had four cases at one time among my in-patients at Brompton and all of them left the hospital free from pneumothorax and with their lung condition otherwise greatly improved. Pneumothorax is more common in cavitation than in fibrosis.

But hæmoptysis in this stage is a most serious matter, and its occurrence to any great amount must cause, to say the least, grave doubts of the patient's recovery. It is the greatest danger of this stage of the disease and is more frequent in the cavernous than in the fibroid state. As in the first and second stages

it may be due to mere congestion or to ulceration of a vessel, but, if copious, it is most frequently caused by rupture of an aneurysm of the pulmonary artery in a cavity. I show you here what I think must be a unique collection of such aneurysms, occurring in almost every variety and with almost every form of surroundings. Their presence is a warning that percussion should always be very lightly employed, for a study of these specimens will convince you that the slightest jar of the thorax might be sufficient to cause rupture of the aneurysm. While I was pathologist at the Hospital for Consumption and Diseases of the Chest, Brompton, I only once failed to find such an aneurysm in a cavity after fatal haemoptysis in the third stage. Observe, too, that the aneurysms are often found in only small cavities, so small as to be detected only with difficulty. The aneurysms are caused by suction. During cough the air contained in the cavity is partially expelled and the cavity walls are compressed, but on the relief of the pressure the walls expand once more and before the full quantity of air can gain re-admission there is a period of negative tension in the cavity which acts as a suction power on the wall of an exposed artery. Finally, it must be remembered that for a long time, for many years in fact, tuberculous matter may remain embedded in the walls of an apparently healed cavity or in a mass of fibrous tissue, and though the disease is quiescent, yet at any time a fresh outbreak of the disease may occur. The patient, perhaps, need not be informed of this, for he can scarcely avoid it in any way than by the general attention to hygiene which he is bound otherwise to pay, but it should be remembered by the physician in formulating his prognosis.

I have not dealt with all the elements of prognosis, but only with those which seem to me to be of most importance. In my next lecture I will discuss with you a few points of treatment.

# A Clinical Lecture
ON
# THE OPERATIVE TREATMENT OF FIBROID TUMOURS OF THE UTERUS.

*Delivered at the General Hospital, Birmingham, on Nov. 13th, 1900,*

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GENTLEMEN,—In the course of our comments upon the treatment of fibroid tumours of the uterus you have, no doubt, been struck with the considerable diversity of opinion expressed by various authorities. You will remember that some months ago the question of operative treatment was brought to our notice by some cases in the wards. I then resolved to put the next half-a-dozen cases which came under my observation to the test with a view of demonstrating to you the best plan generally to follow. I have, therefore, taken these six cases of supra-vaginal hysterectomy, not, indeed, as offering anything new, but with the object of submitting a short clinical account and arousing an interest in a class of cases which are frequent enough to warrant the statement that, like other and less desirable patients, they represent a type which is always with us.

No doubt in dealing with the question of treatment in this particular disease the greater principles include the less in discussion, but it is more especially with the operative methods that I wish to offer suggestions and to state my conviction that in the plan adopted we have in certain cases an ideal operation, one which amply satisfies the demands of the disease, and which, when favourably carried out, reflects with credit upon the surgical art of modern times—a cure effected with less reservation than is attached to many abdominal operations, a restoration fulfilling not merely the purpose of statistics or adding to the glamour of individual skill, of which, indeed, there is no monopoly, but an enduring benefit obtained by the patient and a solid satisfaction to those who minister to it. The operation is comparatively simple. I premise a preliminary preparation of the field, in which the vagina is also strictly attended to. The Trendelenburg position is a very desirable adjunct if it can be obtained: it adds greatly to the advantage of sight and facility of manipulation. The abdomen is opened in the middle line in the usual way and if possible the tumour is brought outside; if not, the first steps, at all events, can be done *in situ*. A ligature of strong silk is placed through the broad ligament near the pelvic wall and firmly tied, thus securing the ovarian vessels. A second ligature or a pair of rather long-beaked, narrow forceps is placed at the uterine end of the broad ligament, near to the cornu of the uterus; the part between them is cut through. The round ligament is also tied. The process is repeated on the opposite side. The tumour is now much more moveable and the ovarian vessels are safe. The peritoneal covering just above the bladder is then separated in front by running a knife lightly across the cervix; the same is done behind, the ends meeting at the sides of the cervix. The bladder is then gently but well pushed down to separate it from the cervix; the uterine arteries can now be located. A blunt needle and silk ligature are passed below them and they are strongly tied. This may be either within the peritoneal fold or inclusive of it. Sometimes it may be more convenient to loosen the tissues containing the artery and to tie it separately in its continuity. The cervix or pedicle is now cut through from above downwards by a V-shaped incision at the front and back, forming two flaps which come readily together. It is recommended by some that the cervical canal should now be seared by actual cautery or that some strong antiseptic, such as carbolic acid or a solution of perchloride of mercury, should be applied to it. This I have never done, as I assume that the upper part of the vaginal canal and cervix are normally free from infective germs and that additional security has been afforded by the cleansing in this direction previously mentioned. The cervical flaps thus made are brought together by silk sutures, three or four in number. The peritoneum is brought over the end of the stump and attached to the corresponding structure posteriorly by Lembert's sutures of fine silk. Similarly the edges of the broad ligaments are joined all across the pelvis. Generally the stump where the ovarian vessels have been tied can be brought down to, or near, the angle at the side of the cervix and turned in under the peritoneal fold, thus covering all the wound over and forming a united line across the pelvis, which represents a neat finish to this part of the operation. The pelvic cavity is then made perfectly clean and dry and the abdominal wound is closed. The latter is effected by running five or six silkworm gut sutures through the walls; these are held together on each side by a pair of forceps while the other sutures are put in. The peritoneal edges are brought together by a running catgut suture, the fascia by fine silk interrupted sutures and the skin by catgut sutures, continuous or interrupted; the silkworm gut sutures are then finally tied. But occasionally conditions are found which necessitate considerable modifications to this plan and which serve to tax our resources severely. When the tumour is intra-ligamentous growing more or less within the layers of the broad ligament and involving adjacent structures, it is impossible to eliminate it in this way. The best plan in such cases is to modify the procedure as follows. The broad ligament and the round ligament are tied on one side, whichever is the more free; the broad ligament is then cut through on the same side down to the level of the uterine artery, and this is firmly secured. The whole mass is then dragged to the opposite side and the cervix is cut across; the bladder being separated in front, the uterine artery is now found and ligatured. This assured the growth can be separated from between the layers of the broad ligament up to or near to the ovarian vessels. These can be clamped or tied and the operation may be completed in the usual way. The altered relations of the ureter or inflammatory adhesions demand more caution and attention to detail. Step by step the process can be accomplished, and as a rule a satisfactory ending can be obtained though more anxious and more prolonged in the performance. The cardinal points in all operations of this kind appear to stand out in relief—they are complete asepsis, perfect haemostasis, and accurate adaptation of adjoinin parts; the peritoneum being ever kept clean and dry. Without doubt the Trendelenburg position materially lessens the difficulties; it is a factor which has conduced largely to the confidence and to the comfort of the operator, to the ease and celerity of the operation, consequently, therefore, to its success.

The indications for operation upon such cases present themselves generally in a definite form and may be received as reliable reasons for interference. I am well aware that the majority of fibroid tumours call for no active surgical interference. I have under observation a number of such patients, some of more than 20 years' standing, many of whom are content, if not satisfied, to pursue the uneven tenour of their way with placid acquiescence and belief in the powers of nature. At times their faith is shaken, they falter for the moment in their confidence, but soon drift again into the position of masterly inactivity. Fostered by semi-invalidism and with no lack of comforts they can afford to exist and even to enjoy bad health. Such a condition, in the well-to-do classes at all events, is often accepted with passiveness born of hope for the future. In the working-classes this attitude is intolerable; this expectant probation is an illusion—they must do or die; they cannot supinely wait. Hence comes an influence in our advice as to operative treatment. It must inevitably be allowed to play an important part and, I think, may justly be considered to be an element in the pursuit of active measures. 1. Social position, therefore, becomes to some extent a guide in the selection of cases for operation. 2. Excessive and persistent hæmorrhage undoubtedly is a ground for interference—hæmorrhage which has resisted for a length of time rest, hot douches, and therapeutics of tried and of unknown efficacy. I have little confidence in these so-called hæmostatics. The continued use of ergot is lauded as a standard prop by some in such cases—it is a broken reed to lean on and often fails when most trusted for help. Nothing that I know of medically admits of a safe prediction as to results in cases of this kind. We know that oftentimes the bleeding is erratic. We learn, too, that the drug last administered at a venture often gets the credit—the outcome of credulity which is met by a specious and hollow success. 3. Occasionally the pain and discomfort due to pressure symptoms entail a consideration of interference. This is most frequent when the tumour is in the pelvis, where it encroaches upon neighbouring viscera or nerves or distends the uterine walls, giving rise to suffering of a severe kind. As the tumour rises from the pelvis in its growth these symptoms often subside, and it then happens that the only symptoms arise from the weight and discomfort of the mass. The effect is a mechanical one, disarranging functions and causing inability to obtain rest for any length of time in one position or to move about with ease. Still, large tumours may exist with very little complaint on the part of the patient who by long continuance becomes accustomed to, and tolerant of, the burden. There is a mutual adaptation of the patient and the tumour to each other. 4. Rapid growth of the tumour is a first indication for the review of surgical treatment. But even here we often meet with difficulties in the formation of a decisive opinion. The ways of fibroids are dubious and inconsistent. The rate of growth is sometimes visibly fast, it may then stop without apparent cause and remain stationary for a length of time. In such circumstances it provokes a revision of our advice and an alteration in the patient's inclination to submit to a serious operation for its removal. When the rate of growth is unquestionable, and particularly if there are signs of associated complications, our path becomes more clear and our duty imperative. There is less need for conservative surgery when the functions of the uterus and ovary have fulfilled their destiny, but there is great need of help when signs of degenerative changes occur or complications threaten to gain the mastery of the patient.

But, it may be asked by some, why wait until untoward signs or symptoms appear? why not operate early in order to avoid the greater peril of a more severe operation when the growth is larger and circumstances are less favourable? These questions indicate the trend of modern surgery based upon sound judgment and the experience gained in the success of operative details. But few will pretend that because a fibroid tumour is present the patient must be operated upon. What I have already remarked shows how faulty such a practice would become. There are, however, numbers of patients to whom a life of misery would be avoided, an untimely death prevented, and restoration to usefulness achieved if a timely warning had been heeded. Nor is this picture overdrawn. The testimony of expert witnesses proves how real are the dangers which environ the subjects of fibroid growths. Martin of Berlin furnished an analysis of 205 cases of fibroid tumour which had been submitted to operation. Discussing the changes to which they are liable he states that in at least 38 out of the number, or in about 18 per cent. of the cases, changes took place in the fibroids that seriously endangered the life of the woman. The great majority of cases, says a high authority,[1] demand operative treatment. The danger of operation is much less than the danger to which the woman is exposed from the various accidents which are liable in this disease. Dr. G. E. Herman[2] quotes Dr. Matthews Duncan whose words are always entitled to respect: "A woman with an enormous fibroid will not live to be an aged woman." Writing of the degenerative changes in the tumour, changes in the heart, pressure symptoms, &c., Dr. Herman says that these are thus not merely contingent risks but actual and persistent evils. "A well-advised patient will therefore welcome relief by operation." Mr. Bland-Sutton,[3] with the enthusiasm of his skill, advocates early removal of such kind of tumours as involving less operative danger and a diminished peril to life. He performed 28 operations with two deaths. Dr. W. Duncan[4] publishes 68 cases with four deaths, and Dr. W. J. Gow stated at a meeting of the Obstetrical Society of London that in 18 months he had saved 16 out of 17 cases. The largest number of statistics is given by Dr. Herman from Olshausen. Thus in 806 cases of supra-vaginal amputation of the uterine body there were 45 deaths, or 5·6 per cent., and 520 cases of removal of the whole uterus (so-called "panhysterectomy"), with 50 deaths, or 9·6 per cent.[5] Additional evidence of success might be brought from many operators, but enough has been said to be suggestive of serious consideration in our views of operative treatment and to point to the direction in which the surgery of our time is capable of extending beneficial aid.

CASE 1.—Operation in this case was performed on June 19th, 1900. The age of the patient was 45 years. There was history of influenza some two years previously, since which the general health had failed. The body was thinner and the abdomen was steadily getting larger, with pain in the back and inability to move about with ease. The abdomen was occupied by a large, rounded, smooth, elastic tumour reaching about four inches above the umbilicus per vaginam. The cervix was high up posteriorly. The body of the uterus was not well made out, but it moved with the mass bimanually. There was a bruit at the base of the heart. There was no albumin. The catamenia varied in amount and regularity. The operation was performed in the manner which has been described. The growth, which was interstitial from the back of the fundus, weighed 10 lb. 2 oz. The ovaries were large and cystic. The highest temperature was 100° F., on the day after operation, and the highest pulse was 108, on the same day, after which the normal condition was resumed and good recovery followed, the patient leaving the hospital on July 16th.

CASE 2.—The patient, a married woman, aged 28 years, was operated upon on July 11th, 1900. Previously to her marriage, which took place in October, 1899, she had menstruated irregularly and profusely. After her marriage she noticed a "lump" in the lower abdomen which rapidly increased in size. Menstruation had become constant. There was pain in the back and difficulty in movement was complained of. A central, hard, irregular tumour was felt in the abdomen, reaching to the lower level of the umbilicus and extending to each side. A mitral bruit was marked. There was no albumin. The patient expressed a wish for operation in the face of the pain, the hæmorrhage, and the rapid growth of the tumour. This was carried out in the usual way. The growth was nodular and hard and sprang from the posterior wall of the uterus; it weighed 3 lb. 12 oz. The ovaries were large and cystic and the broad ligaments were short. Nothing eventful followed the operation and the patient went home on August 4th. She has since written to say how well she is.

CASE 3.—The patient, a pale, thin, anæmic woman, aged 39 years and unmarried, was operated upon on July 26th, 1900. A year previously she had noticed a "lump" on the left side of the abdomen and a few months ago another one on the right side. Menstruation was irregular and profuse and the patient suffered from pain and weakness. In the left iliac and hypogastric region an elastic, rounded, smooth

[1] Penrose: Diseases of Women, p. 232.
[2] Diseases of Women, p. 836.
[3] Transactions of the Obstetrical Society of London, vol. xxxix., p. 292.
[4] Pamphlet, 1900.
[5] Op. cit., p. 846.

tumour could be felt. To the right of the middle line a hard mass reached in the pouch of Douglas below, and bimanually it was felt to be incorporated with the uterus. At the time of operation the left side was found to be occupied by an ovarian cystoma, and on the right was a hard fibroid. The whole was removed with the uterus. The fibroid weighed 2 lb. 8 oz. The ovarian cyst contained 40 ounces of thin, mucoid fluid. For a few days after the operation the temperature continued at 101° F.; the patient was flushed and restless, with no increase in the pulse-rate. A week later after a normal interval the temperature again rose, but subsequently the patient did well. She left the hospital on August 21st, and after a few weeks' convalescence returned to her duties.

CASE 4.—In this case the operation was performed on August 7th, 1900, upon an unmarried woman, aged 44 years, who for two years previously had noticed a swelling in the abdomen. Menstruation was profuse and irregular and there were clots. Several times there had been retention of urine. In the hypogastrium a hard, rounded mass was felt which was continuous with the uterus. The cervix was pushed up posteriorly. Bimanually an irregularity of the mass was noticed. There was a systolic bruit at the base. There was no albumin. The tumour, which weighed 2 lb., sprang from the anterior and posterior walls of the fundus; posteriorly it was covered by the uterine wall, anteriorly it was sub-peritoneal. The left ovary was normal but the right was enlarged and cystic. There were numerous small, broad ligament cysts. The highest temperature reached was 100·4° F. and the highest pulse-rate was 88. The patient left the hospital on August 30th in a good condition.

CASE 5.—The patient, who was 51 years of age, had been married for 13 years but had had no children and there had been no miscarriages. 18 months previously she had noticed that her abdomen was getting larger and that recently it had been increasing in size more rapidly. Menstruation was fairly regular but profuse. She had been getting thinner generally and had suffered from pain and discomfort after food and on movement. The heart sounds were normal and there was no albumin. The abdomen was occupied by a firm hard mass reaching above the umbilicus; its circumference measured 39 inches. From the umbilicus to the right spine it measured eight inches and to the left spine seven inches. Per vaginam the cervix could be felt high up in front with a hard mass behind, continuous with the growth above. The patient was anxious for operation. This was done on Sept. 12th, 1900, in the same way as in the previous cases. The tumour was dumb-bell shaped, the lower hard mass filling the space of Douglas, the larger growing from the fundus. Its weight was 5 lb. 8 oz. There were some spaces with reddish-coloured thin fluid inside. The recovery was rapid and the patient returned home to the country on Sept. 29th.

CASE 6.—The operation in this case was performed on Sept. 27th, 1900. The patient, who was 33 years of age, was married on August 29th. Some weeks before there had been retention of urine. Since the time of her marriage the abdomen had been getting rapidly larger. Menstruation was profuse and painful, and the general health of the patient had been failing. There were a hard mitral bruit, sickness, and anæmia. A mass was felt in the abdomen reaching obliquely across from above the umbilicus on the left to behind the uterus below and bulging into the right iliac fossa on its way. The cervix was high up above the symphysis. The patient was advised to go to the seaside to improve her general health before any operation. This she did with much benefit. The operation revealed a large fibroid mass, nodular and hard, growing from the fundus; it weighed 4 lb. 3 oz. The ovaries did not show any change. The recovery was not marked by any incident worthy of notice. The patient returned home on Oct. 20th and has continued to improve in health and appearance.

*Vaginal hysterectomy.*—You have opportunities not infrequently of seeing this operation. In the time at my disposal now I do not intend to carry you into the details of the operation which you must see and judge for yourselves. It is applicable to the smaller cases of tumour, which are, as a rule, accessible from this aspect. Not that it is confined to these only, for some operators prefer this route and extract tumours by it which reach to the level of the umbilicus.[6] In this operation I usually tie the broad ligament on each side instead of using clamp forceps. Occasionally it will be seen that the uterus has to be divided anteriorly in order to deal with adhesions or after difficulties in extraction. It is the exception to find that patients so operated upon go wrong; as a rule the cases give rise to very little anxiety and are singularly free from rise of temperature or pulse. When by splitting of the uterus the complications cannot be overcome there is yet another plan to fall back upon—morcellation—that is, cutting away piece by piece of the uterus until it is all, or sufficient, taken away to make a satisfactory termination. This is tedious and troublesome, but it repays the time and the attention given to it when ablation cannot be otherwise attained.

[6] Pryor: Pelvic Inflammation p. 214.

## THE BOWEL LESION OF TYPHOID FEVER.

BY T. J. MACLAGAN, M.D.

THE cause of typhoid fever, the true nature of the poison which gives rise to it, was long obscure. We now know that it is a minute organism, the typhoid bacillus, first described and figured by Eberth in 1880. It is a short thick bacillus with rounded ends, which is largely reproduced in the system during the course of the disease to which it gives rise and is found abundantly in the glands which suffer during an attack of typhoid fever. This bacillus is directly or indirectly the cause of all the phenomena of that disease—the bowel lesion among others. That lesion is indeed the most prominent and important result of the action of this poison, constituting as it does the characteristic and essential feature of the disease to which it gives rise. How does the bacillus cause this lesion?

An organism which grows in, and at the expense of, another is a parasite. A distinctive feature of parasitic organisms is that each has its own nidus, its own special habitat, in which it flourishes and is reproduced, and in which its vital activity and morbific effects are chiefly manifested. The parasite of ringworm attacks the roots of the hair of the scalp; that of sycosis the roots of the hair of the moustache and beard; the trichina spiralis finds its home in muscle; hydatids have a special affection for the liver; and so through the whole parasitic world each parasite has its own special organ or tissue in which it is reproduced and which is the chief seat of its action as a disease-producing agency.

What applies to the grosser parasites applies equally to the very minute ones which constitute the poisons of specific diseases. The tubercle bacillus specially affects the lungs and glands of susceptible subjects; the poison of erysipelas attacks the skin, that of pneumonia the lungs. So with the poisons of the specific fevers: that of scarlet fever finds its nidus in the skin and throat; it is in these localities that it is specially reproduced and its specific action manifested, and it is in the discharges from the throat and in the peeling cuticle that the poison, therefore, most abounds. The poison of small-pox has its nidus in the deeper layer of the skin and exists in greatest abundance in the pustules which form there; it is, indeed, the very rapid reproduction of the poison in that locality which causes the disturbance which results in the formation of the pustules. The typhoid poison finds its nidus in a particular set of glands in the small intestine; it is there that its action is specially manifested, and it is in the affected glands and in the discharges which come from them that the poison exists in greater abundance.

What imparts to each of the specific fevers its distinctive and characteristic feature is not any peculiarity of the general febrile disturbance but the existence of a special local lesion. The seat of this local lesion is the nidus of the parasite: in scarlet fever the skin and throat; in measles the skin and mucous membrane of the respiratory tract; in small-pox the deep layer of the skin; and in typhoid fever the intestinal glands. The action which takes place in this nidus is the vivification of this poison, an action which in its results is analogous to the fecundation of non-parasitic organisms. It is the first act in the play, the first incident in the series of events which make up the history and course of an attack of any of the specific fevers.[1]

[1] The only one of the specific fevers which has no local lesion is relapsing fever; it is also the only one in which the special poison of the disease (the spirillum) is found largely in the blood. It has no local lesion because the blood is the special nidus of its parasite.

It is from this point of view, from the point of view of the essentially parasitic nature of the typhoid poison, that we have to approach the subject of its mode of action and of the nature and mode of production of the bowel lesion of typhoid fever. That the typhoid poison causes that lesion and that the lesion is peculiar to, and distinctive of, typhoid fever are two established pathological facts.

There are two sets of glands in the intestine—those situated in its mucous lining and those which have their seat in the submucous coat. In the mucous lining are found the glands of Lieberkühn, distributed all over the bowel, but more abundant in the large than in the small intestine. They are small tubes closed at their deeper extremity. In the submucous coat are found (*a*) Brunner's glands which have their seat in the submucous coat of the duodenum and consist of minute lobules with branching ducts which open on the mucous surface of the bowel; (*b*) solitary glands or lymph follicles, consisting of small round or oval masses of adenoid tissue which are scattered more or less all over the bowel; and (*c*) the agminated glands or Peyer's patches, which consist of masses of lymph follicles grouped together in the submucous coat. They are found in the jejunum and ileum, chiefly in the ileum, and most abundantly at its lower part, near the ileo-colic valve. These patches vary in length from half an inch to one and a half inches; they are oblong in shape, their long axis being that of the bowel. They are largest and most closely packed at the lower end of the ileum. These are the glands that specially suffer in typhoid fever. The solitary glands are also affected to an extent which corresponds to their small size and more sparse distribution. Brunner's glands do not suffer. The brunt of the disease is borne by the Peyer's patches. These glands are not equally developed at all periods of life. In infancy they are small and not easily detected; as years go on they become larger, and by the time that the age of 15 years is reached they are prominent objects in the intestinal wall and remain so till middle life. They then begin to get smaller and gradually dwindle away till in old age they disappear. Their period of greatest activity is from 15 to 35 years of age; it corresponds exactly to the period of greatest susceptibility to the action of the typhoid poison. The immunity from typhoid fever enjoyed by the very young and the very old finds its explanation in the life-history of these glands. They scarcely exist in the infant and they dwindle away in old age. The typhoid bacillus may enter the systems of such subjects and circulate in their blood, but it finds no nidus, no soil in which it can be vivified and reproduced; it is, therefore, without action on them. For it is in these glands, and in these glands only, that the typhoid poison finds the material necessary to its vivification and reproduction; it is in them that it commences its course as a disease-producing agency; it is in them that its morbific effects are most pronounced; and it is the destructive action which takes place in and around these glands that gives rise to the most formidable and fatal complications of typhoid fever.

How is this effect brought about? What is the mode of action of the typhoid poison on these glands? and what is the mode of production of the lesions which are found in the post-mortem room? Let us trace the course of events in one gland from beginning to end, for what takes place in one gland is what takes place in all, the whole bowel lesion being but the sum total of the lesions of the individual glands. A typhoid germ having entered the circulation may or may not reach one of these glands, may make the round of the circulation again and again, and may ultimately pass out of the system by one or other of the eliminating channels without ever coming in contact with its nidus, and therefore without doing any harm. That is possible; and probably such an event is of not infrequent occurrence, especially in infants and old people; but we are now dealing with a case in which the poison does come in contact with, and enter, one of the glands which constitute its nidus. A bacillus can enter only one gland; this may be a solitary gland or it may be one of Peyer's patches. The chances are very much in favour of its being one of these patches at the lower end of the ileum, and that simply because by the ordinary doctrine of chance the germ, no matter whether it enters the system through the lungs or by way of the stomach, is more likely to be brought in contact with one of these numerous patches than with a small solitary and isolated follicle. The germ then enters one of these patches; but it cannot at once affect the whole gland; it enters only one of the numerous follicles of which the gland is composed; it is there reproduced, giving rise, say, to four others (though it may with equal probability be ten or a dozen); these four soon have 16 descendants; these 16 have 64, which in turn act like their parents, and so the process goes on, the germs ever increasing in number, and doing so with ever-increasing rapidity as they become more numerous; they escape into the circulation, pervade the system, grow in the tissues, and invade other glands in the bowel. Meantime the morbid process advances in the one first attacked—follicle after follicle is rapidly affected till the whole gland is invaded. This rapid increase of the typhoid poison within its structure necessarily causes increased vascular activity and increased flow of blood to, and corresponding excitement in, the gland. For the bacillus, in virtue of its nature, takes from the blood the same materials which the tissues of the gland take up. The excitement thus produced in the gland results in proliferation of its cellular elements and consequent increased size and thickening of the gland, which thus becomes a prominent object in the intestinal wall. This marks the completion of what may be regarded as the first stage of the bowel lesion. The gland is inflamed, swollen, hard, and a prominent object in the intestinal wall, but still entire and unbroken. In a certain number of cases the lesion goes no further, the inflammation terminates in resolution, the swelling subsides, the gland returns to its normal condition, and the disease comes to an end by the middle or end of the second week. It is only in a minority that this favourable result takes place. In most cases the morbid process continues and the inflammation increases till the gland softens, dies, breaks down, and sloughs away. This it does during the third week. By the beginning of the fourth week the sloughing process is generally completed and there is left behind a clean sore which soon begins to heal. This terminates the second and, in favourable cases, the final stage of the disease.

That is the normal course of events in a Peyer's patch in an ordinary typical case of typhoid fever in which convalescence begins at the end of the third or beginning of the fourth week. But though the story of one gland is the story of all, the general picture of the events and incidents which make up the complete history of the bowel lesion is not quite so simple, and that mainly because the individual lesions which constitute the sum total of the bowel troubles are not quite contemporaneous, and, therefore, not equally far advanced at any given time. The glands are not all attacked at the same time. One always suffers first, then others follow at varying intervals. The morbid process is thus not equally advanced in all. In those first attacked the destructive process has reached its height and they begin to soften and break down, while others are still only in the stage of thickening and enlargement. As a result of this we constantly find in the same bowel, especially in cases which prove fatal during the third week, two sets of lesions, the hard and the soft, the *plaques dures* and the *plaques molles* of Louis. They are exactly the same lesion at different stages of development. The hard would have broken down and become soft had the patient lived a little longer. Louis thought that the *plaques molles* were more common than the *plaques dures*, and in the post-mortem room no doubt they are so, for most, and in many cases all, of the glands slough, break down, and become soft before death takes place. Whether or not, therefore, *plaques dures* are found after death depends on whether or not there has been time for the most recently affected glands to soften and break down before the fatal termination. They are more likely to be found in cases which prove fatal during the third week than in those which run on into the fourth or fifth. All the soft lesions were hard before they became soft, and all the hard will become soft if time is given them to do so, unless, indeed, they terminate in resolution.

The morbid process is most pronounced at the lower end of the ileum near the ileo-colic valve. From this it has

That poison finds in the blood what the poison of small-pox finds in the skin and the poison of typhoid fever finds in the intestinal glands—that something which a nidus supplies to the parasite and which is essential to its vital activity. In this respect, in its peculiarity of finding its nidus in the blood, the spirillum of relapsing fever resembles the plasmodium malariæ, and the disease to which it gives rise is stamped with some of the characteristics of intermittent fever. It is indeed a sort of clinical link between the continued and intermittent fevers; it is highly contagious and occurs in widespread epidemics; it therefore takes rank among the contagious fevers, but it has a relapsing or intermitting course, it has no local lesion, one attack confers no immunity from a second, and the poison is found abundantly in the blood. In these respects it resembles malarial fever.

been supposed that the lesion commences there and spreads upwards. The reason why the lower end of the ileum suffers most is that the glands which are specially affected in typhoid fever are most abundant and most closely packed at that end. The typhoid bacillus finds the material necessary to its growth and propagation in greatest abundance there; it is this concentration of the susceptible glands and consequent richness of the soil that makes the morbific action of the bacillus so pronounced in that locality. The discharge from one gland may, and probably often does, irritate neighbouring glands, but the ones to suffer in this way will be those below, not those above, the discharging gland, for the trend of the bowel contents is downwards, not upwards; and probably one reason why the lesion increases in severity as we descend the ileum is that the discharges from all the upper affected glands must pass over those below them; the lower we descend the greater the disturbance from this cause.

Yet another agency comes into operation here: the swelling and turgescence of the mucous membrane at the ileo-colic outlet so narrows that opening that the passage is likely to be less free than usual, causing some retention in the ileum of its irritating contents. These are adjuvant causes, but, after all, the primary reason why the typhoid lesion is most marked at the lower end of the ileum is that the Peyer's patches are largest and most numerous in that locality; they are so abundant that there is little room for healthy bowel between the lesions.

The state of the glands and the changes which take place in them as a result of the action of the typhoid poison have been described by many pathologists. The best of the early accounts is that given by John Goodsir who describes the morbid changes as consisting in "the development of cells within the constituent vesicles of the patches to such an extent as at last to burst them or cause their solution, the continued increase in the number of cells proceeding from as many centres as there are vesicles in the patch, the conglomeration of the whole into one mass above the submucous and under the mucous membrane, the distension of the latter and the necessary ulceration and sloughing of the mass arising from the circumstance."[2] All descriptions of the lesion agree with Goodsir's. They all describe it as essentially consisting in swelling and thickening of the glands due to proliferation of their cellular elements. Malory, the most recent observer, describes and figures this increased development of cells, which he says "may take place diffusely through the lymph nodule, but may also start at the centre or at the periphery."[3] The change which takes place in the affected glands is an acute proliferation of their cellular elements and cellular and granular contents and consequent swelling of the follicles. This must be caused by acute irritation arising within the substance of the patch, for there is no appearance of external irritation or disturbance and no increased vascularity of the mucous surface till the follicular changes are well advanced. The cause of the whole disturbance is the rapid reproduction of the typhoid bacillus within the substance of the follicles.

It has been supposed by some that the phenomena of typhoid fever, including the bowel lesion, are caused, not directly by the typhoid bacillus, but by a toxin produced by the bacillus in the blood. Such a poison would in virtue of its nature be equally diffused through the blood and would necessarily affect all the glands equally and at the same time. But it is matter of demonstration that the intestinal glands are not all affected at the same time. In the same bowel there are constantly seen lesions at various stages of development, some only at the stage of hardening and swelling, while others have gone on to the stage of softening and sloughing; and some glands escape altogether, as is evidenced by what is observed in cases of fatal relapse; there the lesions of the first attack are seen to be clean and healing, if not quite healed up, while those of the relapse are still in the sloughing stage. Only on the view that the poison is particulate and not equally diffused through the blood can this be explained, for were it equally diffused and a toxin the cause of the disturbance all the susceptible glands would suffer, they would all be affected at once, at the time of death the morbid process would be equally advanced in all, and relapses with fresh lesions would be impossible.

This toxin hypothesis is not only cumbersome and unnecessary but is also less satisfactory than that which attributes the essential phenomena of typhoid fever to the direct action of the bacillus. There is no evidence of the existence of a typhoid toxin and no adequate reason for postulating its existence. There is ample evidence of the existence of the typhoid bacillus; it is a common acquaintance, we know it by sight, we recognise it as the cause of typhoid fever and do not for a moment question its claim to be so. Why go in search of a problematical cause when we have to our hand one which we know to be in active existence and whose action gives an adequate and reasonable explanation of the phenomena with which we are dealing?

But though I regard the view which ascribes the essential phenomena of typhoid fever to the action of a toxin as untenable, and look upon the bacillus as competent to produce them all by its direct personal action, though I claim this important rôle for the bacillus, and believe that it is directly by its action that the essential phenomena of typhoid fever are caused, I by no means exclude from consideration the possibility of other morbid agencies coming into play. On the contrary, I believe that after the glandular lesion has reached the sloughing stage other agencies do come into play, and that to these agencies are to be ascribed many of the more serious symptoms which are apt to show themselves in the third and fourth weeks of the illness. For with the process of sloughing and suppuration there come into play other morbid agencies—agencies which not only prolong the illness but add much to its gravity. These agencies are the various forms of cocci (streptococci, staphylococci) which are associated with the processes of sloughing and suppuration. It is at this stage that toxins might not unreasonably be supposed to come into play, the toxins, not of the typhoid bacillus, but of the cocci which accompany the suppurating stage of the bowel lesion. This stage of typhoid fever resembles both clinically and pathologically the stage of secondary or suppurating fever of small-pox, which shows itself on the eleventh or twelfth day of that disease when the variolous eruption enters on the stage of suppuration, this secondary fever being caused not by the small-pox bacillus, but by the organisms associated with the process of suppuration.

Had we nothing to deal with in typhoid fever but those symptoms and lesions which are the direct and necessary result of the action of the typhoid bacillus, were the general symptoms of the disease only those caused by this bacillus, and were the bowel lesion limited to such disturbance as essentially results from its direct action, it is probable that all cases would terminate at the end of the second stage, that typhoid fever would be bereft of most of its dangers, and that the percentage of deaths from it would be very much smaller than it is. The typhoid bacillus acts solely on the glands of the submucous coat. On the mucous, the muscular, and the peritoneal coats it has no direct action; and yet it is to lesions involving one or more of these coats that the most serious and formidable complications of typhoid fever are due. In the early stages of the disease there are swelling and hardening of the glands, but no inflammation or unusual redness of the mucous membrane. Not till the glandular lesion is well advanced and has entered on the sloughing stage does the mucous membrane give evidence of being seriously involved in the morbid process. It is not the typhoid bacillus but the irritating discharge from the gangrenous and sloughing glands that causes the redness and turgidity of the mucous membrane noted in the post-mortem room, and the diarrhœa which is symptomatic of it during life.

So with the muscular coat; when it is invaded, as it often is, the destructive effects produced are caused not by the typhoid bacillus but by the irritating discharges which come from the sloughing gland lying on its surface. In their destructive course these discharges may penetrate the muscular coat and invade and even penetrate the peritoneal lining of the bowel. In the production of the bowel lesion of typhoid fever there are thus two agencies at work: (1) the typhoid bacillus; and (2) the irritating discharges of the sloughing glands. The former operates during the whole course of the disease; the latter comes into play towards the end of the second week; and not till it comes into action are serious symptoms apt to show themselves, for it is not till this sloughing process affects the mucous lining of the bowel that diarrhœa is apt to occur; it is not unless and until the muscular coat with its free blood-supply and larger vessels is invaded that serious hæmorrhage occurs; and it is not until by the continued destructive action of this process the muscular coat is penetrated and the peritoneum invaded that

[2] London and Edinburgh Monthly Journal of Medical Science, 1842.
[3] Journal of Experimental Medicine, New York, November, 1898.

we have evidence of peritoneal inflammation with its attendant dangers.

For clinical purposes cases of typhoid fever may be divided into three classes: (1) those in which the glandular lesion does not pass beyond the stage of inflammatory thickening but terminates in resolution without sloughing, and in which convalescence commences at the middle or end of the second week of the fever; (2) those in which the lesion terminates in sloughing of the glands but in which the process is limited to the glands and the mucous membrane immediately over them, and is accompanied by no evidence of active disturbance and no serious indications of bowel irritation, and in which convalescence usually begins at the end of the third week; and (3) those in which the sloughing process is more extensive and in whose course diarrhœa, hæmorrhage, abdominal distension, peritonitis, with attendant typhoid general symptoms show themselves during the third and fourth weeks of the disease and in which life is seriously threatened by these complications. The fact that it is only a minority of cases of typhoid fever that come under this third class, and only in a minority, therefore, that the serious symptoms which characterise it occur, show that these symptoms are no essential part of the typhoid process, no essential part of the action of the typhoid bacillus on the bowel. And a very little consideration will show why there should be so great a variety in the severity of the bowel lesion in different cases. For what is the state of matters? Up to a certain point the local lesion consists only in inflammation of some glands situate in the submucous coat of the bowel—from a clinical point of view the least important of all its coats. So far as any local effects are concerned the lesion, while still only in the inflammatory state and limited to these glands, is a comparatively trivial one, so trivial that it causes no disturbance, no local symptoms of any kind, and gives rise to no trouble by which its existence could be diagnosed. We know that the lesion is there only from what we know of the natural history of the disease, for at that stage it has no clinical symptoms.

The advent of the stage of sloughing alters the whole aspect of affairs, for then we have to deal, not with simple inflammation, but with gangrene and all its attendant dangers. These dangers may or may not declare themselves, but they are always there and often do come very much to the front. Hitherto the lesion has been limited to the unimportant submucous coat and has consisted in proliferation of the cellular and granular contents of the affected glands, but now, when sloughing sets in, we have to deal with a more or less virulent destructive process which spreads to other coats; affecting the mucous coat it causes turgidity, redness, inflammation, and destructive ulceration; spreading to the muscular coat with its free blood-supply it exposes the sufferer to all the risks of serious hæmorrhage and to the still greater risks attendant on extension of the mischief to the peritoneal coat. But even that is not all. The dangers attendant on gangrene are not only its local destructive action on the affected textures; there is also the very great danger of septic poisoning, a danger which is specially marked when the structure involved is so rich in lacteals and in veins as that which suffers in typhoid fever. What we have to deal with after the second week in bad cases of typhoid fever is not only the symptoms, local and general, caused by the typhoid bacillus, but those due to the absorption into the system of septic material derived from the sloughing and gangrenous sores—sores which are situate in a mesh of veins and lacteals whose function it is to absorb and carry things into the system. That, more than the direct action of the typhoid bacillus, is the cause of those alarming symptoms, general as well as local, which characterise the late stages of bad cases of typhoid fever. The local symptoms are those of gangrenous ulceration of the bowel; the general symptoms are those of septic poisoning.

From this pathological standpoint we may now survey the symptoms to which the bowel lesion gives rise during life and weigh the clinical importance of each.

*Diarrhœa.*—This is not an essential feature of typhoid fever; many cases run their course from beginning to end without its occurrence, while in not a few the bowels are constipated during the whole course of the malady. These are generally mild cases in which the bowel lesion is not sufficiently severe to give rise to any symptoms, and in which we know that it exists only from what we know of the natural history of the disease. Mere inflammatory swelling of glands situate in the submucous coat, without any participation of the mucous lining in the mischief (and that is what we have to deal with during the first week of the disease), is not likely to cause diarrhœa or any other local symptom. It is not till the glands begin to slough and break down and the mucous membrane over them becomes involved in the morbid process that diarrhœa is apt to occur. Such diarrhœa is symptomatic, not of inflammation of the glands of the submucous coat, but of the extension of the ulcerative process to the mucous membrane. In fatal cases in which diarrhœa has been a marked symptom during life the turgid redness of the mucous membrane around and between the ulcers gives ample post-mortem evidence of the extent to which that membrane had suffered during life.

The amount of diarrhœa varies much. There may be only two or three loose stools in 24 hours or there may be 10 or 12. Their frequency depends on the extent and severity of the local lesion. Up to a certain point looseness of the bowels is rather favourable than otherwise; beyond a certain point it becomes unfavourable. It is obviously desirable that the separated sloughs should be got rid of and not be allowed to lodge about in the bowel, irritating it and tending to poison the system. Two or even three free stools a day favour the discharge from the bowels of their sloughy and injurious contents; by so doing they more than counterbalance any weakness resulting from their occurrence. More than three such stools a day is more than is desirable, and anything beyond that should, if possible, be checked. Persistent and frequent diarrhœa occurs only in severe cases and is always an unfavourable symptom. It means that the bowel lesion is very extensive and that there is much ulcerative destruction and inflammation of the mucous as well as of the submucous coat. The stools in typhoid fever are generally pale in colour. In milder cases they are of the colour and consistence of pea-soup; when diarrhœa is more marked they are thinner and more like ochre. In very severe cases they may be dark in colour from oozing of blood from the ulcerated surfaces. The occurrence of frequent dark-coloured stools is one of the gravest complications of typhoid fever. The stools are always more or less offensive and have an alkaline reaction.

*Hæmorrhage.*—Bleeding from the bowel is generally regarded as one of the gravest complications of typhoid fever, and yet we find such distinguished observers as Trousseau and Graves and Griesinger recording the opinion that such hæmorrhage may be innocuous and in some cases even beneficial. The importance to be attached to it, its attendant danger, and its prognostic significance depend on its amount and on the period of the disease at which it occurs. The intestinal arteries enter the bowel at its mesenteric attachment and subdivide in the muscular coat, sending good-sized vessels to ramify between the longitudinal and the transverse fibres; passing to the submucous coat they enter it after further subdivision and diminution in size, and ultimately reach the mucous coat much diminished in calibre. Hæmorrhage may take place from the vessels of any of these coats. From the mucous coat it may take place in one of two ways: it may be due to rupture of distended and engorged veins or it may take place in the ordinary course of ulceration. When due to rupture of veins it occurs early in the case, is not of great amount, and is not unlikely to do good by relieving congestion. When it occurs in the course of the ulcerative process it is of arterial origin and occurs later. It can do no good, but neither, as a rule, does it do much harm, as the vessels of the mucous membrane are not large enough to be a source of serious bleeding. From the submucous coat blood can flow only during the process of ulceration. Such hæmorrhage can never be salutary, but neither is it likely to be very injurious, for the same reason as applies in the case of the mucous coat, the vessels are not large enough for free hæmorrhage.

Bleeding from the vessels of the muscular coat is always serious. It never takes place at an early stage of the disease, because it cannot occur till after the gland has sloughed and the irritating discharges from it begin to eat their way into the muscular coat. When once this coat is invaded there is always the risk of serious hæmorrhage. The affected glands are situated at the side of the bowels by which the vessels enter it—its mesenteric attachment. They are right over the larger vessels of the muscular coat, and should one of these be opened in the progress of the ulcer there is likely to be a considerable loss of blood. The risk of this accident is directly as the number of glands affected; it is, therefore, more likely to occur in severe cases in which

many glands suffer than in mild ones in which the special lesions are less numerous. It must be borne in mind, however, that one ulcer may suffice for the purpose and that a profuse hæmorrhage may suddenly impart an aspect of gravity to a case which up to the time of its occurrence had been looked upon as quite mild. This is one of the possible accidents which make a guarded prognosis advisable in all cases of typhoid fever.

The amount of blood lost varies. It may be so profuse as to precipitate a fatal termination. It always does harm and materially affects our prognosis. It indicates the existence of at least one progressive ulcer, and there is no saying where such an ulcer may stop; it may open into other vessels or it may invade the peritoneum in its destructive course. The occurrence of profuse hæmorrhage has sometimes been diagnosed before any blood has passed per anum, pallor and prostration, failing pulse, and fall of temperature pointing to what is soon verified by the presence of blood in the stools. Cases, too, are recorded in which death took place before any blood was passed but in which it was found post mortem in the gut.

There is another form of hæmorrhage whose occurrence, though the actual loss of blood is not so great as in that which we have been considering, imparts even greater gravity to the case and more seriously affects our prognosis. I refer to those alarming cases in which during the third week or later the patient passes frequent dark-coloured, offensive stools. The dark colour is due to the intermingling with the stools of blood which comes not from the giving way of an artery but from a general oozing from the ulcerated surface. These malignant cases bear to typhoid fever the same relation that hæmorrhagic small-pox does to ordinary variola. They nearly all prove fatal.

*Peritonitis.*—This is an almost necessarily fatal complication in typhoid fever. It is so because of the cause which gives rise to it. In an odd exceptional case it may be caused by a splenic infarctus or rupture of a softened mesenteric gland, but in the vast majority of cases it is due to perforation of the bowel. The destructive ulcerative process which invades the muscular coat may also completely penetrate it and eat its way through the peritoneal lining as well. Peritonitis means perforation. There may be only one perforation or there may be several. Generally there is only one, and it is quite enough for all lethal purposes. The opening may be not much larger than a pin-point or it may be large enough to admit the point of the finger. The symptoms are the sudden onset of acute pain in the abdomen, increased abdominal distension, cessation of abdominal movement in respiration, pinched aspect of the face, feeble, thready pulse, and all the symptoms of collapse from which there is no rally. In the production of this accident the typhoid bacillus plays no direct part. Indirectly it is, no doubt, the remote cause of this as of all other phenomena which occur in the course of the disease to which it gives rise. But its direct action is limited to the glands of the submucous coat. The immediate cause of the destructive ulceration of the muscular and peritoneal coats, and therefore of perforation, is the irritating discharge from the sloughing glands. When the affected glands have sloughed and separated the action of the typhoid bacillus on them is at an end. Not so that of the irritating discharge which accompanies the processes of sloughing and suppuration. This new destructive agency comes into play as the typhoid bacillus is retiring from the field and continues its destructive action independently of it and on whatever structure it comes in contact with. It may all be carried away with the sloughs as soon as they separate and so do no great harm; or it may, from tardy separation of the sloughs or unusual severity of the attack, be retained at the seat of the lesion long enough to enable it to eat into, and even penetrate, the muscular and peritoneal coats. An agency which much increases the danger from this cause is the swollen condition of the ileo-cæcal outlet. By such swelling this outlet is materially diminished in size, the passage downwards of the contents of the small bowel is correspondingly retarded, the sloughs and irritating discharges from the ulcerated surfaces are unduly retained in contact with these surfaces, with the certain risk of causing them to eat more deeply into the bowel. The more numerous the glandular lesions and the more severe the attack the greater is the chance of perforation. But here, as in the case of severe hæmorrhage, it is to be noted that one ulcer may suffice and that perforation may suddenly come like a bolt from the blue in a case whose symptoms up to the moment of its occurrence were of the mildest character.

The points to be noted in connexion with the bowel lesion are:—1. That the structures on which the typhoid bacillus exercises its specific effects are the solitary and agminated glands situated in the submucous coat of the small intestine. 2. That the change which it causes in these glands is inflammatory in nature and essentially consists in proliferation of their cellular and granular contents, with consequent swelling and hardening of the glands. 3. That this inflammation is generally sufficiently severe to cause gangrene and sloughing of the affected glands. 4. That the direct action of the typhoid bacillus is limited to the glands of the submucous coat; and that it has no direct action on the mucous, muscular, or peritoneal coats. 5. That the sloughing process which destroys the glands necessarily also destroys the mucous membrane situated over them. 6. That with the process of sloughing and suppuration there come into play other and new morbid agencies, the various forms of cocci associated with these processes. 7. That to these new agencies rather than to the typhoid bacillus are to be attributed all the more serious complications and all the formidable symptoms, general as well as local, which are apt to show themselves during the third and fourth weeks of the disease.

Cadogan-place, S.W.

# CONCERNING CERTAIN APPARENTLY INJURIOUS CONSTITUENTS OF POTABLE SPIRITS.

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## PRELIMINARY COMMUNICATION.

THE phenomena exhibited by the human subject when poisoned by the ordinary potable spirits are very varied, and are caused no doubt by complex conditions which may, however, be divided into two classes—viz., those that depend upon the individual and those that depend upon the composition and nature of the spirit drunk. It is to the latter that we have directed our attention. These differences in the phenomena produced by the alcoholic beverages ordinarily consumed are more marked in the initial stages of alcoholic poisoning. To put it in plain language, it is when a man begins to get drunk and when he begins to get sober that he is apt to find out the quality of the liquor which he has taken. In the intermediate stage between these two conditions—viz, that of deep drunkenness—it matters but little. As the ethylic alcohol is common to all potable spirits, changes other than quantitative in this substance cannot be the cause of what may perhaps best be termed the subsidiary effects (*Nebenwirkungen*) of acute or chronic alcoholism. The main points in which potable spirits differ *inter se* are with regard to their aldehyde, compound ether, higher alcohol (fusel oil), and certain volatile base contents. This communication is devoted to the question of the aldehyde contents of various potable spirits and liqueurs, and especially to one particular aldehyde—viz., *furfural*.

The source of furfural in the manufacture of whisky, and of beer to a less extent, is a class of substances known as pentosanes; these are present in, and derived from, the cellulose of the grain husks. Under the influence of heat in the presence of acids furfural is formed from them. The substances which we have examined in this connexion are whisky fresh from the pot still and mature, brandy, gin, rum, various impure and cheap spirits used in the colonies—such, for instance, as "Cape smoke"—and also a number of Spanish, Portuguese, Chinese, and Japanese cheap alcoholic drinks. These substances all contain aldehydes and furfural in varying proportions, the latter substance in some cases (according to quantitative estimations made by Professor Hewitt) to the extent of 0·03 gramme per litre. The presence of furfural in, for instance, whisky can be easily demonstrated by taking a teaspoonful of whisky in a test tube, diluting with an equal volume of water, and adding a few drops of a sodium carbonate solution, and then a few

drops of solution of aniline acetate. If the test tube be shaken up and allowed to stand a rose-pink colour will soon develop if furfural be present, and the deepness of the colour will be approximately proportional to the amount of this substance in the sample of whisky under experiment.

The experimental part of our work may be divided into two parts. We first endeavoured to ascertain the physiological action of furfural upon animals and man. In this connexion we made experiments upon cats, dogs, and rabbits and observations upon two men. By means of these experiments we found that doses of furfural of from 0·1 to 0·05 gramme injected subcutaneously caused paralysis of the voluntary muscles, and later clonic and tonic convulsions, probably due to asphyxia, with rapid and irregular breathing. An odd point about these symptoms was their transient nature; immediately after the injection of the drug the animal would fall down completely paralysed, its tongue and lips would become bluish, and its breathing sometimes very slow and convulsive and at other times irregular and rapid; it would then pass into a stage of clonic and tonic convulsions, in many cases it would vomit, and, finally, would begin to recover, being at first dazed, but rapidly becoming apparently normal. The whole cycle of symptoms would often be completed in from 20 minutes to half an hour. Sensation never seemed to be affected, the conjunctival reflex was always to be obtained, and when the voluntary muscles were paralysed strong reflex irritation (faradaic current) was generally responded to by changes in the respiratory rhythm. Smaller doses always caused symptoms of transient irritation, such as ataxia, tremors, and twitching, especially of the facial muscles. In the case of larger doses than 0·5 gramme death was produced from asphyxia due to paralysis of the respiratory muscles. Almost identical symptoms were produced when the substance was given by the stomach mixed with milk or water, in doses of about 0·5 gramme in cats. The effect of the drug was less marked when given with milk and much more marked when administered upon an empty stomach. In the case of man 0·1 gramme of furfural was taken two hours after lunch by two men; the pulse and respiration were unaltered, but about half an hour afterwards pain (like neuralgia) was felt at the back of the neck and extending up to the occipital region, and a sensation of throbbing and pulsation in the vessels of the head. A dull headache ensued which in one case lasted for the rest of the day. Both in the case of man and in the cases of animals the urine gave a furfural reaction with aniline acetate after the administration of the drug.

The second series of experiments which we undertook were made to ascertain whether the removal of the furfural, or to speak more accurately the aldehydes from the potable spirits, produced any change in the symptoms of alcoholic poisoning. One of the differences, *inter alia*, between raw and matured spirit is the quantity of aldehydes which they contain, matured spirit containing a smaller quantity than is contained in the raw spirit. Up to the present the obtaining of an aldehyde-free spirit has been a matter of some difficulty; we were, however, able by the use of a method described fully elsewhere by Professor Hewitt to remove entirely the aldehydes from any given spirit.

The symptoms of alcoholic poisoning produced by equal doses of the spirit free from aldehydes and the spirit containing aldehydes were compared in the case of animals. The method adopted was to render an animal paralytic and anæsthetic with the potable spirit under observation before and after the removal of the aldehydes and to watch its recovery—i.e., its return to what was presumably its normal state. Speaking generally it was found that the return from what may be termed profound drunkenness in the cases of animals was more sudden and was accompanied by less secondary symptoms when aldehyde-free spirit had been given. In the case of the spirit containing aldehydes the animal during the transition stage was restless, wandering from one part of the laboratory to another, and seemed, generally speaking, remarkably uncomfortable. Even when the gross symptoms of alcoholic poisoning had passed off the animal did not behave normally for some time, refusing the food offered to it, and showing marked signs of bad temper. These secondary phenomena were entirely absent in the case of the aldehyde-free spirit. The animal woke up and attempted to stand; if it could not, it went off to sleep again. When it was sober it appeared perfectly normal and if offered food took it.

The interest of these observations lies in the fact that these disagreeable symptoms, which seem analogous to those occurring in the human subject after too free potations, seem to be more referable to the aldehydes in the spirit, including furfural, than to the spirit itself or any higher alcohols. Fusel oil was present in the spirit both before and after distillation.

The aldehydes are pharmacologically active, their action depending, according to Loew, upon their combining with the amido groups ($NH_2$) of the proteid molecule; their antidote, or at least one of their antidotes, is ammonia, which forms with them an innocuous compound. This fact has a bearing upon the subject in hand, for the substances which have a reputation amongst alcoholics as "morning pick-me-ups" contain either ammonia or simple or substituted amido groups, or just those groups which are capable of neutralising aldehydes. If the residue which is left behind after distilling the spirits with phenyl hydrazine sodium sulphonate be treated by appropriate methods the aldehydes are liberated. It is to the pharmacological action of this distillation residue that we are at present directing our attention, and we hope to be able to publish our results with it shortly, as well as a more exhaustive account of those enumerated above, with the literature of the subject.

## SUGGESTIONS FOR THE PRACTICAL TREATMENT OF TYPHOID FEVER.

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UNTIL the time shall come for the prevention and cure of typhoid fever by germicides the chief objects of our treatment should be: (1) to limit the extension of the ulceration; (2) to treat the ulcers; and (3) to obviate their giving rise to hæmorrhage or perforation. For the present my remarks must be limited to the medical aspects of treatment.

*Stagnation of putrid fæces* is probably one of the chief dangers. Though it may be to a great extent prevented it is often overlooked. When stagnant the more fluid are the fæces so much the more likely are they to lead to toxic absorption. Whilst, then, there is an indication for reducing their fluidity, there is undoubted advantage in any method which provides for their ready evacuation. The difficulty lies at the seat of ulceration, where the accumulation due to paralysis of the bowel may amount to obstruction. Much of the alarming tympanitis of bad cases is probably due to the resulting fermentation in the delayed intestinal contents, and this points to the importance of emptying the cæcal pool. On the whole, a lessened fluidity or a moderate solidity of the contents of the lower bowel would seem to be preferable to the opposite extreme, which is a characteristic of the worst forms of typhoid fever. The lesser evil of constipation incidental to an astringent treatment is one easily overcome by daily injections. Due attention to these essential points might perhaps have yielded better results from the various antiseptic remedies which have been tried and subsequently discarded. For the treatment of enteric ulcers, as for that of ulceration in general, an adequate alimentation and local sanitation and antisepsis are the first requisites. If any local effect can be obtained from the internal administration of medicines some mildly astringent influence is apparently the best and the same is also indicated as a prophylactic against hæmorrhage.

*Relative inactivity of the liver* is the inevitable consequence of the pyrexia, of the immobility of the patient, and of an exclusively fluid diet. Much of the value of Brand's treatment is, I believe, due to the relief which it affords in that direction. Systematic cool sponging is also efficacious and it is available in all cases; whilst high temperatures may call for the gentle use to the skin of ice wrapped in flannel. But in my experience the cool bath is rendered unnecessary by the administration of mercury which excels all medicinal antiseptics in being at the same time a powerful hepatic stimulant and in providing for the bowel a sufficient supply of its normal antiseptic the bile. We should not lose sight of the mechanical factors. Our anxiety to avoid peristalsis may have been excessive. *Distension* of the thinned and ulcerated membrane is the real danger. In view of a possible hæmorrhage or perforation moderate contraction of the bowel is the better state and is in itself protective,

though active peristalsis is obviously to be avoided. An attempt to carry out some of these principles is contained in the following suggestions, which for the sake of brevity will not include any reference to diet and to nursing, as these matters are now receiving greater attention and are better understood.

*The postural treatment.*—Often in the course of an enteric attack there is obvious fulness and tension and extensive dulness over the right iliac fossa, and a sensation of weight will be conveyed to the hand when placed behind the loin, whilst the left iliac fossa is soft to the touch and resonant. Now it will be found that if the patient be placed for a few minutes on his left side and once more examined in the supine posture the conditions are entirely reversed, the right flank being resonant and soft and the left iliac fossa or the descending colon dull and resistant. Repeated observation of this result has for the last three years led me to arrange the bed so as to keep the patient at intervals, or in some cases permanently, in a position of slight inclination towards the left. *A partial lateral decubitus* which I have usually found to be sufficient for the purpose may easily be obtained by placing a bolster or a firm pillow under the right side of the mattress so that the body is propped over towards the left. A better method, which has the advantage of not disturbing the patient, consists in inclining the bedstead by blocks of suitable height placed under its two right feet, whilst the patient maintains the dorsal decubitus. Inasmuch as a slight elevation of the foot of the bed is a decided help, a double inclination may be obtained by using three blocks of uneven heights. The bed in this case looks uncomfortable but I have not heard of any complaint on the part of the patient. Either of these methods will fulfil an indication of the first importance by emptying the cæcal pool which I regard as an obstruction and as responsible for fæcal stasis higher up and for the toxic typhoid state. When the first method is resorted to there is no object in its being enforced continuously so long as the state of the bowel is carefully watched and the cæcum and lower ileum are kept empty. In anxious cases the other plan is decidedly to be preferred and should be kept up during the period of danger. The methods in question are, in my experience, free from risk and from appreciable discomfort and I have not been led to suspect that any undesirable strain is thrown upon the diseased bowel.

*The medicinal treatment.*—The remaining indications have appeared to me to be best carried out by the treatment recommended some years ago by Mr. W. B. Wedgwood of King's Lynn. Though it will not avail against the fatality of the worst attacks it has, so far as I have been able to judge, mitigated the severity of the great majority of cases, and has almost always led to an early amelioration manifested by the disappearance of sordes, the cleaning of the tongue, the clearing of the complexion, and, above all, the return of the appetite. For an adult 20 minims of the liquor hydrargyri perchloridi and from 15 to 20 minims of the tinctura ferri perchloridi with one drachm of syrup of orange or lemon and an ounce of water are administered every six hours throughout the attack, and for 10 days after defervescence to obviate a relapse. Diarrhœa, if present, is quickly stopped, except in the worst cases, and the constipation which often ensues and coincides with an excellent progress is remedied by daily injections of glycerine. The results have been so satisfactory that the administration of alcohol is hardly ever necessary and is carefully avoided lest it should dull the appetite or burden the liver, but port wine is invariably given during convalescence. In the now considerable series of cases treated in this way salivation has never been observed, and the treatment is always well tolerated provided the dose is administered at an interval from milk meals, even should, as is my invariable rule, the milk be peptonised.

To which of the ingredients the greater share of usefulness belongs it would be hard to say. In my opinion they are both valuable. An astringent effect of the iron upon the entire intestine is rendered probable by its constipating effect upon the lower bowel. We may, therefore, reasonably assume that it acts as a local application to the ulcers, whilst it tends to constrict the bowel and its blood-vessels against the risk of hæmorrhage. The many-sided virtues of mercury are probably exerted upon the hepatic, the lymphatic, and the mucous systems, and it is not unwarrantable to suppose that its prolonged administration in frequently repeated doses may be an element in the disinfection of the alimentary canal.

Curzon-street, W.

## THE TREATMENT OF A CASE OF ACUTE DILATATION OF THE STOMACH.

BY GEORGE COATES, M.A., M.D. OXON.

THE following case of acute dilatation of the stomach in an infant, three weeks old, who finally recovered and in whom the recovery seemed to be entirely due to systematic washing out and cleansing the stomach, appears to be worth recording. I have called the case one of acute dilatation of the stomach, as that was the main feature, though from the collection of cases of hypertrophic pyloric stenosis in infancy in a paper by Dr. Eric Pritchard [1] I have no doubt that stenosis of the pylorus, either spasmodic or structural, was the cause of the dilatation.

The patient, a girl, was born on Jan. 24th, 1900, and weighed 7 lb. 13 oz. She seemed quite healthy and apparently remained so for nearly three weeks. Her mother endeavoured to nurse her, but failed after trying to do so for some days. She was then fed on humanised milk, from a dairy company. On Feb. 14th she began to be frequently sick. From the 17th to the 19th the vomiting suddenly changed its character: she was sick only once in the 24 hours, but then, the nurse said, a very large quantity, at least a pint, came away, soaking all her clothes. At the same time her micturition became very scanty and the bowel contained only small quantities of mucus stained almost black with altered bile. Her stomach was manifestly enormously dilated, whilst from the absence of residue of food in the bowel and the very scanty micturition it was evident that little or nothing passed through the pylorus; but whether there was stenosis of that opening or whether the enormous dilatation of the stomach had produced there such a kink that nothing could pass through it was not evident. The treatment devised was to feed her at intervals of from two to three hours with small measured quantities of food, and one teaspoonful of the following mixture was given after each meal to aid digestion and to try to prevent fermentation from taking place in the dilated stomach: acidi hydrochlor. dil., 25 minims; glycerini pepsini acidi, one and a half drachms; acidi carbolici purissimi, half a grain; aq. ad one and a half ounces. On Feb. 19th Dr. Thomas Barlow saw her with me and confirmed the diagnosis and treatment. On the 28th, as she was slowly but steadily losing ground, nutritive enemata were given; each enema consisted of one ounce of peptonised human milk with two drops of brandy. These enemata were given every three hours until the end of May and, with the exception of a few days when there was some diarrhœa, they were always retained and were absorbed. The bowel was washed out once a day with soap and water. Early in March she had a severe attack of gastro-intestinal catarrh with sickness and diarrhœa. The vomit contained greenish-yellow muco-pus mixed with curds. The stools were frequent and foul-smelling. She had fever, the temperature varying from 99° F. in the morning to 102° at night, and a loud endocardial mitral regurgitant murmur was developed. She lost flesh very rapidly, her weight being 5 lb. 13 oz. on March 17th—a loss of 2 lb. since birth. Her condition at this time looked perfectly hopeless. She was in a state of extreme emaciation, with shrivelled dry skin and a distended abdomen. The front abdominal wall was so thin that the liver area could be distinctly recognised from the dark colour of that organ showing through it. The dilated stomach could also be easily made out, and slowly moving peristaltic waves were seen passing over it from time to time. For a few days milk was entirely stopped by the mouth and she was put on raw meat, meat juice, and warm water as food, and sulpho-carbolate of soda and carbonate of bismuth as medicine. A few days later, as her temperature never rose above 99° and the diarrhœa had stopped, human milk was given as well. On March 19th she had still lost weight, being now 5 lb. 11 oz. at seven weeks from birth, when she ought to have weighed over 10 lb. From her constant loss of weight and general condition it was obvious that she must die unless the state

[1] Archives of Pediatrics, April, 1900.

of her stomach could be improved, and as a last resource it was determined to wash it out with a solution of sodium bicarbonate, 25 grains; sodium sulpho-carbolate, 15 grains; euthymol, half a drachm; aq. ad one and half ounces. On March 22nd a No. 12 soft elastic catheter, indiarubber tube, and glass funnel were used; the catheter was passed through the mouth every morning about three hours after a meal. When the catheter entered the stomach some wind would generally escape and then from three to four ounces of thick slime and curdled milk would be evacuated through it. The stomach was then washed out and the resultant fluids were measured. Immediately after the stomach was cleansed a teaspoonful of the following mixture was given: spiritus ætheris chlorici, 15 minims; bismuth carbonate, 40 grains; sodium bicarbonate, 12 grains; sodium sulpho-carbolate, half a drachm; decoctum hæmatoxyli, six drachms; aq. cinnamom. ad one and a half ounces; and a quarter of an hour later she was fed with from two to three ounces of human milk freshly drawn off. She was fed alternately from every two to three hours with from two to three ounces of human milk and one ounce of meat juice. She was not put to the breast as it was considered important that she should have no opportunity of overfilling the stomach. From this time her improvement was decided; she spent very comfortable days but used to get rather restless by evening and was decidedly uncomfortable during the night. The day after the washing out was commenced she began to pass much more urine; three days later and subsequently she had almost normal motions. At the end of March the meat juice was stopped and she was put regularly to the breast. By April 2nd she had gained two ounces. By the 6th she had gained two more ounces. As her nights were so bad and the days were so good she was from this time washed out regularly night and morning at about three hours after a meal. Each time about three ounces of slime and curd were removed. On the 16th she had improved so much that a trial was made to see if washing out in the morning only would do, but her nights became restless again, and the evening washing-out of the stomach was resumed. By May 1st she had gained over one pound, her weight being 6 lb 13 oz. She made uninterrupted progress, so that by the 12th the residue of slime and curd removed was reduced to between one and a half and two ounces. After the 19th she was only washed out occasionally. On the 23rd, after 48 hours' interval, only one and a half ounces of residue were found. On the 30th her weight was 8 lb. 4 oz. She had improved steadily ever since and on July 17th she weighed over 12 lb. Her heart was now perfectly normal, the murmur having disappeared on March 29th.

There were two points that are worth noticing: 1. The patient's sensations of hunger were apparently caused by the absence of digestible food in the stomach. She always showed signs of hunger two or three hours after feeding, even though her stomach, as ascertained by the catheter, might contain three or four ounces of slime and curd. After this had been removed, the stomach cleansed, and two or three ounces of milk given, she would appear to be satisfied for over two hours, although the stomach really contained less material than when she was very hungry. Her sensations of repletion depended on the nutritive value rather than on the quantity of the matter in the stomach. 2. Her attack of severe febrile muco-purulent gastro-intestinal catarrh was rapidly followed by the appearance of a loud mitral systolic murmur which resembled in every way one due to rheumatic endocarditis. Soon after the stomach was brought into a healthier condition and the catarrh and fever had subsided, the murmur disappeared, and the heart has since then appeared to be healthy.

Cases of febrile disturbance, accompanied by some gastro-intestinal trouble and followed by excited action of the heart and the development of an endocardial murmur, usually at the mitral orifice, are very common in children, and this case appears to show that the endocardial infection may have entered the body from the alimentary canal. It is always dangerous to generalise from only one case, but this one shows that an extremely severe attack of acute dilatation of the stomach was cured by systematically cleansing that organ twice a day. As the treatment was persevered with the residue of slime and curd became less, and though at first from day to day no great difference could be seen, after every few days it was clear that the food given was being better digested, that less slime was secreted, and that the stomach was in a healthier condition and was regaining its normal functions.

The main point in the treatment appears to be the removal of the residues of slime and curd. This is analogous to the removal of residual urine and mucus in cases of aggravated catarrh of the bladder where the prostate is much enlarged. These residual fluids kept at the temperature of the body form most excellent incubating media for various species of bacteria and promptly infect and contaminate any fresh liquids, whether milk or urine, added to them. Drawing off the residual fluid and washing out the stomach in this case were quite as satisfactory in their results as emptying and washing out the bladder are in these cases of cystitis. Here I may mention that there was some difficulty in getting the catheter to pass the larynx and to enter the œsophagus, but with a little patience it could always be done. Towards the end of the treatment, when the stomach had been restored to a healthy condition, it was evident that it had regained its power of emptying itself through the pylorus. The child had regular natural stools and since then has shown no signs of having an abnormally large stomach or narrow pylorus. I have to thank Dr. Barlow for his valuable aid in February and March.

Brechin-place, S.W.

## A CASE OF COMPLETE TRANSVERSE SEPTUM OF THE VAGINA IMPEDING DELIVERY; URETHRAL COITUS.

BY E. RUMLEY-DAWSON, L.R.C.P. LOND., M.R.C.S. ENG.

THE patient was a primipara, aged 21 years, to whom I was called when in strong labour. Her history was as follows. She had had scarlet fever when she was six years of age, but her mother had never mentioned that the attack was in any way unusual, neither had she any recollection of pain or discomfort on sitting down or on micturition. She had never received any injury in the genital region. She had always been regular in her menstrual periods and they were not excessively or abnormally painful. She had never had any symptoms to lead her to think that there was anything abnormal in the vagina. She always had some leucorrhœa but had not seen a medical man for it. The nurse noticing that in spite of strong labour pains no progress seemed to be made at last sent for me.

On examining the patient in the left lateral position the index finger unknowingly and without pain passed direct into the bladder. On more deliberate and ocular examination the external genitals were quite normal but the urethral orifice was found to be very dilated, while the vaginal orifice was small. The finger passed less than an inch into the vagina, meeting with an obstruction which, when a labour pain set in, felt like a large "bag of waters," and bulged with the pain. No cervix could be found and no fornices. The child's head could be felt per vaginam to be pushing down on to the obstruction and making it bulge. On examining per vaginam and rectum it was quite easy to get the obstruction between the fingers. It was found to be a rather thick transverse septum or diaphragm; this could also be plainly felt on examination per urethram and vaginam. The septum between the finger-tips was felt to be about one quarter of an inch thick at the insertion into the vaginal wall, thinning down to the centre and becoming thick again at the opposite vaginal insertion. It was evident that a complete transverse vaginal septum was preventing the descent of the head. No hole or aperture could be found anywhere in the septum, but no examination under an anæsthetic was made. The bulging down of the septum by the advancing head so stretched it that even a small hole would have been revealed. The septum was not in the site of the hymen.

Though the patient denied being aware of any abnormality, sexual intercourse it was admitted had been difficult from the first; while several months after marriage it became impossible, still later there had been less difficulty as the urethra was gradually dilated. The dilatation of the urethra had followed as the result of repeated attempts at coitus; she had not, however, been troubled with incontinence of urine, though urination had become more frequent. This increased frequency may have been partly

or even entirely, due to the pressure of the enlarged pregnant uterus. The septum was incised with a knife between two "pains," the incision was then enlarged with a finger tearing it through, the "waters" were ruptured, and the child very shortly after was delivered quite easily and naturally.

*Remarks.*—Cases of transverse septum of the vagina are distinctly rare, and when leading to urethral coitus, and later impeding labour, they become still more rare. Vaginal septa are either transverse or vertical, but only the former will be considered now. Transverse vaginal septa are either congenital or acquired—i.e., inflammatory in origin. The one now described was evidently congenital, for though she had had scarlet fever there was no history of genital inflammation.

Dr. C. J. Cullingworth[1] has recorded two cases of transverse vaginal septa. The first case, that of a widow, aged 38 years, was due to an attack of "inflammation at the age of 12 of the genital organs." There was an opening in the "thin and flexible septum" large enough to admit a uterine sound. Though she had been married nearly six years she was never pregnant and was "not aware of any difficulty or inconvenience in her marital relations." In the second case the septum obstructed labour; it was evidently a congenital case. There was always slight leucorrhœa, and pain at the periods was "excessive" during the previous three years on the first day only of the flow. Under ether an opening of the size of the urethra was found in the septum, this was dilated and torn through, delivery soon following.

Dr. Cullingworth remarks that probably in all cases of transverse vaginal septa there is an opening, though often very small, and these small openings show how very enterprising the spermatozoa are. Further, he says that, "as in many other forms of vaginal abnormality, the urethra is often found much larger than usual"; possibly in his case also coitus had taken place per urethram. In atresia hymenalis it was pointed out by Oldham that the urethral orifice is more patulous than it is normally. Dr. C. R. Prance[2] records two cases of transverse vaginal septa. Neither of the patients were pregnant; the first was unmarried and the second was married but was sterile; she soon became pregnant after the opening in the septum—of the size of a pin-hole only—was enlarged and the septum was destroyed. Dr. Gervis[3] also narrates a case. The patient was a woman, aged 22 years. There was an annular hymen which was fairly defined, so that the septum was not a misplaced hymen. She had constant leucorrhœa in the intervals of her menstrual periods. A small probe only could be passed through the hole in the septum, which was very thin. "Whether it was congenital or due to early adhesive inflammation it was difficult to decide." Dr. Cullingworth[4] in his paper says that the septum usually consists of "a thin, not very vascular, and easily lacerable membrane." Dr. R. S. Fancourt Barnes[5] gives a case of a primipara, aged 21 years, where a "thick septum at least two inches in thickness existed." There was a small hole which admitted a uterine sound when some pressure was exerted in its introduction. The septum impeded labour.

These cases of vaginal septa are quite distinct from cases of cicatricial contraction or occlusion of the vagina. These latter have led to Cæsarean section to remove the child when the vagina has been so obliterated as to prevent birth per vaginam. Such a case was narrated by Staude in a paper on Cicatricial Contractions of the Vagina Impeding Labour. It led to an interesting discussion of the subject and its etiology.[6] Dr. Galabin has recorded a similar case.[7]

Concerning the dilated condition of the urethra, the result of admitted urethral coitus, most of the recorded cases of the latter have been in instances of *absent vagina*. In THE LANCET[8] of 1869 it is mentioned that Dr. T. A. Emmet in his book on "Vesico-Vaginal Fistula" (1868) records two cases of coitus per urethram. In both cases the uterus and vagina were absent. The urine was easily retained in spite of the dilated urethra, "which was so patulous that the index finger could be introduced without difficulty" in one of the cases, while "in connexion the bladder had been entered without either party being aware of the malformation." Dr. J. C. Gooding[9] records a case in which the lower portion of the vagina was undeveloped. The retained menses had burst through the urethra. The bladder could be entered with the greatest ease, even with two fingers, and this digital examination of the bladder was painless. There was no incontinence of urine. The patient was married and coitus was followed by immediate desire to micturate. Professor Langenbeck[10] recorded the following case. The patient was 23 years of age; menstruation began at the age of 14 years and the discharge took place per urethram. She had been married for three years. "Coitus was effected by the urethra." The vagina was entirely absent and the uterus was rudimentary.

In the case the subject of this paper the vagina was *not absent*, and it subsequently fulfilled its function as the parturient passage, but the transverse septum in it prevented its proper use in coition and led to the urethra becoming used and consequently dilated. There can be no doubt that previously to, and just after, marriage there was an opening in the septum by which the menses escaped and by which eventually the spermatozoa were able to reach the uterus. That the patient became pregnant must have been due to intercourse having occurred per vaginam. Subsequently to impregnation on an occasion of forcible coitus, perhaps even the identical occasion of her impregnation, the opening in the transverse vaginal septum must have been torn; its edges thus freshened would be approximated by the collapse of the vaginal walls; this tear then evidently eventually healed up, so that at the time of labour no opening on examination could be detected. Thus the upper part of the vagina and the already impregnated uterus became completely shut off. Urethral coitus must have followed as a result of this practical occlusion of the vagina, which probably became more and more marked as towards the latter half of the pregnancy the increasing size and weight of the fœtus and uterus helped to force and bulge down the vaginal septum and thus entirely obliterate the vagina for practical purposes. So patulous had the urethra become that the index finger passed quite easily and painlessly into the bladder.

Leyton, N.E.

[1] THE LANCET, April 13th, 1889, p. 726.
[2] THE LANCET, Dec. 21st, 1889, p. 1273.
[3] Transactions of the Obstetrical Society of London, vol. xxiv., p. 210.
[4] Loc. cit.
[5] Transactions of the Obstetrical Society of London, vol. xxv., p. 99.
[6] Brit. Med. Jour., Epitome, July 1st, 1893.
[7] Transactions of the Obstetrical Society of London, vol. xviii., p. 252.
[8] THE LANCET, Feb. 20th, 1869, p. 260.
[9] THE LANCET, March 22nd, 1879, p. 430.
[10] Brit. Med. Jour., vol. ii., 1879, p. 51.

## AN OBSCURE AND COMPLICATED CASE OF CARCINOMA OF THE STOMACH.

CHARLES FRANCIS STEELE, L.R.C.P. LOND., M.R.C.S. ENG.

CASES of carcinoma of the stomach, which are more or less atypical, are not uncommon, but it is, I think, rare to find practically none of the cardinal symptoms present, as in the case which I am about to describe, especially when the disease is well advanced. The patient was seen during his last illness, to my knowledge, by seven medical men, yet—and I think not unnaturally so—the real state of affairs was not diagnosed, or indeed suspected, until the day before his death. In addition to the obscurity of its diagnosis the case presented interesting complications.

A well-to-do man, aged 46 years, consulted my father, Dr. Charles Steele, for the first time on August 1st, 1900, complaining of debility and depression, also of pain in the lower right chest and behind the lower right ribs, which was aggravated by gentle pressure. The hepatic region was tender in front, but the liver itself was not enlarged. The tongue was coated with a yellowish fur. "Rheumatic" pains in the shoulders, the upper arms, and the pectoral regions were complained of. His general condition was a good deal relieved by saline aperients and rest in bed, and on August 12th he was able to sit up and take food, which he much relished. It was suggested that when he became stronger a "course" at Droitwich might prove beneficial. In consequence of this remark the patient, a self-willed man, insisted upon going forthwith to Droitwich, and he went there on August 16th. The reports from his medical adviser there were not encouraging; the weakness progressed steadily, and after a stay of 18 days he was prevailed upon to return to his home. At Droitwich, by reason of the

marked and increasing weakness, and also the presence of several fawn-coloured patches on the right chest in front and on the back and legs, his malady was diagnosed as Addison's disease. No nausea or vomiting was complained of.

It was at this stage (on Sept. 4th) that the case came under my care, Dr. Steele being away on his holiday. I found the patient in bed, lying on his back. He had apparently stood the journey well. He was of slight build, of dark complexion, and of somewhat anxious expression. The sclerotics were slightly jaundiced, the mucous membranes were markedly anæmic, and the tongue was coated with white fur. During my examination he complained bitterly of pain in the back and chest when turning on his side or when sitting up. On looking at the coloured patches I concluded that those on the legs, being scaly, were due to an old psoriasis of which there was a history; the other patches on the chest and back were caused by the microsporon furfur and faded without treatment. Over the lower right ribs was a distinct bulging, the intercostal spaces being obliterated. The bulging was of about the size and the shape of a small inverted saucer, and it was bisected by the anterior axillary line. Pressure over this area caused considerable pain, which was most intense at one particular spot. On percussing over this bulging the note was deficient in resonance and a distinct thrill was felt. With this exception nothing abnormal was found in the chest. There was no cough. The heart sounds were normal. The pulse, which was full, was regular and of high tension; it was 120, and at no time did it fall below this until his death. The temperature was 100·2° F. and it oscillated slightly above and below this, being at its highest at night. The urine was normal in appearance and there was no albumin or sugar. The bowels were confined. The limb muscles were flabby and wasted. There was no nausea or pain after food. As Dr. Steele also had found, the abdominal muscles were held so rigidly contracted and pressure caused so much discomfort that a satisfactory examination of the abdomen could not be made, but no growth was felt. I concluded that a cyst, which was possibly hydatid but also conceivably of a cysto-sarcomatous or simple nature, was present either in the upper and anterior part of the right lobe of the liver or else between this and the diaphragm. On the following morning in consultation an exploring-needle was thrust into the bulged area and about a drachm of clear pale yellow fluid was withdrawn. An exploratory incision was advised with drainage of the cyst, should such be found, but to this the relatives would not consent. The treatment was therefore purely symptomatic: pain was greatly relieved by morphine and the bowels were kept active by soapy water and turpentine enemata. The swelling appreciably diminished in size, but the wasting and prostration still continued.

On Sept. 16th Dr. R. Shingleton Smith, physician to the Bristol Royal Infirmary, saw the patient with me. At his stage he was in a very critical condition, being intensely anæmic, prostrate, and quite helpless. He lay continuously on his back, apathetic, and listless, and he still complained greatly of pain when he was shifted on to either side or when he was held sitting up in bed. Neither at this time nor during his illness was there any nausea or vomiting, and his food—broths, meat essences, milk, &c.—was well taken and retained. The abdominal muscles were so wasted and the general debility was so great that a much more thorough examination of the abdominal viscera was possible than had been the case heretofore. On pressing deeply beneath the left costal margin two hard lumps of the size of walnuts were to be felt placed side by side but separated by a small interval. A diagnosis of carcinoma of the stomach was made and a hopeless prognosis was given.

In answer to leading questions bearing on the diagnosis the following points in the past history were brought to light. Two years previously a medical man had been consulted, the patient being away from home for change of air, and he had stated that there was a "growth beneath the heart," and on the patient expressing doubt the medical man had exclaimed: "I can feel it as distinctly as I can feel the watch in my waistcoat pocket." It does not appear, however, that he expressed any opinion as to the nature of the growth or mentioned the stomach in connexion therewith. Six months later a quantity of "corruption" was brought up. The medical adviser then consulted considered that the patient had been poisoned, but nothing of this sort ever recurred. Six months later bleeding from the anus occurred, evidently due to piles, which were operated upon, and the bleeding ceased forthwith. There was no history whatever of any nausea or vomiting or pain in the epigastrium, though he had at times complained of uneasiness after food. Only within three months of death had there been any weakness or wasting.

At the necropsy, which I made on the afternoon of Sept. 17th, death having taken place at 6 A.M. on that morning, I found the liver very adherent to the parietes excepting over the area corresponding to the bulging on the surface. Why there should have been so much pain and swelling in this region I do not pretend to know, but I can only suppose that an "adhesion cyst" existed which had been induced to absorb by the drachm or so of fluid withdrawn by the exploring needle. The liver was not enlarged and showed nothing abnormal beyond a thickened capsule. The stomach was not adherent or dilated and the entire length of the lesser curvature was felt to be occupied by a hard mass. The stomach, after ligature, was removed and opened. The contents, three or four ounces, consisted of a pale yellow, thickish fluid. There was no blood. The cancerous mass measured four inches long by two and a half inches wide and it was about one inch in thickness; the pylorus itself was not involved. On the mucous surface of the growth was a large shallow ulcer, measuring two and a half inches by one inch. The edges were blunted and only slightly raised, the floor was ragged, and there was no fresh blood upon the ulcer. The specimen was placed in spirit; it is now in the museum of the Bristol Royal Infirmary. Scattered throughout the great omentum were nodules of growth varying in size from a small pea to a filbert. The pancreas was adherent to the spine, a little enlarged and indurated. The spleen was not enlarged. The kidneys and suprarenal capsules were normal. No other growth was felt. The thoracic cavity was not examined.

The case is remarkable for two reasons: (1) the condition of the liver, where so little mischief gave rise to so much pain and bulging on the surface; and (2) because, although there was such extensive disease of the stomach, there were so few symptoms to indicate it. It is in those cases where the growth is on the posterior wall of the stomach and does not involve the pylorus that carcinoma is likely to be overlooked. My father informs me that, in his experience, the pain and stiffness on movement, which were so marked in this case, not uncommonly point to malignant disease of, or in close proximity to, the spinal column.

Clifton.

## AN INSTANCE OF EXCESSIVE ENTERIC RASH IN CHILDHOOD.

BY ARTHUR MAUDE, L.R.C.P. LOND., M.R.C.S. ENG.

THE accompanying illustration gives a picture of the plenitude of the rash in a case of enteric fever. The patient was an ill-nourished boy, aged 12 years. The rash first appeared on the tenth day and it reached its greatest development five days after. The spots were then so numerous that an attempt to count them absolutely failed, and a comparison with the excellent plate in Murchison's book showed far more than two spots to one. They numbered certainly many hundreds; they were crowded over the abdomen and the chest, they were numerous on the back, the arms, the thighs, and the neck; they occurred on the cheeks and forehead, and they even invaded the margin of the mucous membrane of the lips. This great intensity of rash lasted from about two to three days and was followed by fresh crops of a few spots for several days more. The spots were typical in every way, though a few were of unusually large size and of unusually irregular oval outline. The type of disease was severe and at the height of the rash the child was extremely ill. The rash was beginning to fade when the photograph was taken. Dr. J. S. Tew, the medical officer of health of the West Kent Combined Districts, kindly examined by the Widal reaction for me at the height of the rash. He found marked clumping action with 1 to 40, but the agglutination was not specially rapid, nor

Showing very excessive typhoid rash in a boy aged 12 years. On comparing the rash with the well-known plate in Murchison's work (Continued Fevers) the spots were quite two to one.

were the clumps particularly large. The child was one of a large family of young children, nearly all of whom were affected with severe enteric fever and most of whom had very pronounced rash. Another child had a copious, but not unusual, rash for two weeks; this ceased and the temperature fell to nearly normal for two days, after which a fresh outcrop of rash preceded a marked relapse.

There are certain peculiarities in the occurrence of typhoid rash in children which I have found well illustrated in these cases. The first appearance of rash in children is often earlier than in adults; it occurs frequently by the fourth day. Again, crops of spots may present themselves for a week after a normal temperature has been established. Rash is uncertain in childhood; it is either very pronounced or very slight. Most of the classical writers on enteric fever in childhood (Rilliet, Eustace Smith, Murchison, and West) agree that rash is less frequent and that even in severe cases spots are often quite absent or very sparse. They agree that the spots are less commonly confined to the abdomen and are frequently on the back, particularly about the interscapular region, the loins, and the limbs. This may possibly, however, be due to the facility with which young children, even with enteric fever, are turned about and examined on their posterior aspect.

Another child in my group of cases showed well-marked *taches bleuâtres* straggling faint bluish patches near the umbilicus, having the shape and marginal outline of wet spots on porous blotting paper. It has lately been suggested by Dr. Julius Dreschfeld[1] that such patches are caused by the irritation of pediculi, but with proper deference to so high an authority I must accept the suggestion with profound reserve. By the older French writers, especially Louis and Taupin, sudamina were regarded as very frequent, or even specific, indications of typhoid fever, but I doubt if the opinion would be held now. Probably the patients whom they observed were treated in wards which were kept at a higher temperature than is now customary.

Westerham, Kent.

[1] Allbutt's System of Medicine, vol. i., p. 814.

# Clinical Notes:

## MEDICAL, SURGICAL, OBSTETRICAL, AND THERAPEUTICAL.

### PSORIASIS WITH INSANITY; THYROID TREATMENT; RECOVERY.

BY H. DE MAINE ALEXANDER, M.D. EDIN.,
ASSISTANT PHYSICIAN, PERTH DISTRICT ASYLUM, MURTHLY, N.B.

THE following case may be of interest on account of two affections for which the thyroid treatment has been advocated having occurred in the same case, the mental affection following the skin disease.

A man, aged 33 years, was admitted into the Perth District Asylum on March 3rd, 1898. His history was as follows. He was a servant in a country house. He had developed psoriasis eight months previously and was treated medically without much improvement; indeed, the disease progressed. His life being rendered unbearable by the taunts of his fellow-servants and mental depression ensuing he had to leave his situation. He wandered about the country for a day or two and then gave himself up to the police as he was "frightened" of himself and had suicidal feelings. He was certified as insane and was admitted to this asylum. He had suffered no previous illness and there was no history of intemperance. His father and mother had both had rheumatism. Psoriasis was well marked on the extremities, the buttocks, and the back; it was more diffuse on the chest. Itchiness and hyperæmia were well marked. The scalp was in a seborrhœic condition. The bodily health otherwise was of an average character. He was depressed, suspicious, inclined to impulsiveness, and he asserted that he was suffering from "the bad disorder" and that his body was "crawling with lice"—due probably

to the sensation of the psoriasis scales. His answers to questions were irrelevant and his memory was impaired.

He was put to bed under continuous observation and an aperient was administered. Thyroid tabloids were given in 15-grain doses three times a day after food and he was ordered to be put upon a farinaceous diet. In cases of insanity where the stupor element predominates and where the administration of the thyroid extract is producing a beneficial effect a distinct mental improvement is observed within three or four days from the commencement of the treatment. In this case a change in the mental condition of the patient was noticed on the third day when he woke up from his confused lethargy, appeared quite collected, read a newspaper, and took an interest in his surroundings. He steadily improved. The thyroid extract was reduced to a dose of five grains on the eighth day and was given in that amount daily for one week. His temperature never rose above 99·8° F. nor the pulse-rate above 120 per minute. Perspiration was marked throughout. The psoriasis had entirely disappeared by the end of the fourth week and it left very little scarring. Desquamation of the intervening healthy patches of skin occurred. The patient lost one stone in weight, but he very soon put on flesh again and with an ultimate gain of four pounds. He was discharged "recovered" two months after admission. He resumed his work and had had no further return of the skin affection or mental trouble 18 months later.

Murthly, N.B.

## A PECULIAR CASE OF PURPURA.

BY HENRY W. SPAIGHT, L.R.C.P., L.R.C.S. IREL.

ON Sept. 25th, 1900, a girl, aged nine years, was brought to the Ramsgate and St. Lawrence Royal Dispensary for medical advice. She was seen by Dr. G. B. Courtney and was admitted into the infirmary under his care. The whole body, including the face and the scalp, was covered with purpuric spots, varying from petechiæ to large ecchymoses. When she was going to bed on the night before the patient had noticed some dark red spots about her abdomen and thorax, and in the morning she found her body covered with purple spots. She felt, and appeared to be, in perfect health. She was not anæmic and had not been ill since she was four years old, when she had measles. There was no history of scurvy, rheumatism, or hæmophilia. Her family history was good. On the 26th hæmorrhages occurred from patches on the limbs and continued during the following day, when hæmatemesis, hæmoptysis, melæna, epistaxis, and bleeding from the ears came on and continued until the 28th. During these three days the patient had no symptoms besides those of hæmorrhage. On the 29th the patches on the limbs began to fade, and by Oct. 4th the skin looked perfectly clear and healthy. The patient was discharged recovered on the 6th. She was treated medicinally with two minims of Fowler's solution and one drachm of compound syrup of phosphate of iron, three times daily.

Ramsgate General Hospital.

## A NOTE ON EXCISION OF THE WRIST-JOINT BY A TRANSVERSE INCISION.

BY J. CRAWFORD RENTON, M.D. EDIN.,

SURGEON AND LECTURER ON CLINICAL SURGERY, WESTERN INFIRMARY, GLASGOW; EXAMINER IN SURGERY IN THE UNIVERSITY OF EDINBURGH.

A PATIENT, aged 28 years, was sent to see me by Dr. W. Grant of Blantyre, suffering from tuberculous disease of the wrist-joint. A transverse incision was made through the skin along the crease formed in complete extension of the joint. (This will be found to be posterior to the middle of the carpus.) The skin was dissected upwards and downwards for half an inch and the tendons were pulled to the inner side and the joint was exposed; the diseased bones were removed (the ends of the radius and ulna may be removed if necessary as also the upper ends of the metacarpal bones), the wound was stitched, and the limb was placed on a Carr's splint. The wound healed quickly and the patient has now been working for a year, the incision being hardly perceptible.

A servant girl was sent to me by Dr. Garnett Wilson with tuberculous disease of the left wrist; she was treated exactly as in the above case. She has now resumed her work and the incision is easily covered by her sleeve.

A patient, aged 30 years, with tuberculous disease of the right wrist, was treated in the same manner as the other cases and meantime continues to do well.

The above cases are recorded entirely with the desire to call attention to the posterior transverse incision which leaves very little mark and still gives perfect facility for removing the diseased tissues. Mr. H. J. Stiles of Edinburgh has tried this method and was quite satisfied with the result. With ordinary care there is no danger to the artery or tendons, and I have pleasure in recommending it for trial.

Glasgow.

# A Mirror OF HOSPITAL PRACTICE, BRITISH AND FOREIGN.

**Nulla autem est alia pro certo noscendi via, nisi quamplurimas et morborum et dissectionum historias, tum aliorum tum proprias collectas habere, et inter se comparare.—MORGAGNI *De Sed. et Caus. Morb.*, lib. iv. Prooemium.**

## ST. GEORGE'S HOSPITAL.

### A CASE OF GENERAL CYSTIC DISEASE OF THE KIDNEYS; NECROPSY.

(Under the care of Dr. LEE DICKINSON.)

A MAN, aged 43 years, was admitted into St. George's Hospital under the care of Dr. Lee Dickinson on July 28th, 1900. The patient stated that for about seven years he had been aware that his kidneys were diseased, and that for a much longer period he had been subject to gout, the attacks of which of late years had been both frequent and severe. In 1896 he had been under treatment in the same hospital for albuminuria and gout, and the notes recorded at that time state that he suffered also from ascites, which was thought to be due to cirrhosis of the liver. He had formerly been a free beer-drinker, but had never worked in lead.

The symptoms of which he now complained were shortness of breath, headaches, sleepiness, and occasional vomiting. His aspect was characteristic of advanced renal disease. The breath was uræmic. The urine was highly albuminous and of specific gravity 1010. The complexion was whity-brown, the skin was dry, and the face was puffy, but there was no œdema of the legs. The pulse was hard. The heart was evidently enlarged, though the apex was pushed up behind the fifth rib. The liver also was high, the abdomen being very flatulent throughout. A deep-seated lobulated tumour could be obscurely felt on the left side between the umbilicus and the splenic region; no tumour was felt on the right side.

After being a few days in bed the patient developed an acute attack of gout in the knees, wrists, and great toe-joints, which yielded slowly to colchicum and alkalies. As the arthritis subsided he became notably drowsy and semi-delirious—a condition which hot-air beds and pilocarpine did little to relieve. Subsequently there ensued a state of insomnia and active delirium, passing into maniacal excitement, which ended in death from exhaustion on August 13th.

*Necropsy.*—At the post-mortem examination, which was made by Dr. W. J. Fenton, the kidneys were found to be enormously enlarged and in an advanced stage of cystic disease. The right kidney weighed 32 ounces and the left kidney 40 ounces. To the naked eye the entire organs appeared to have been transformed into a congeries of cysts, no remnants of renal structure being visible. The cysts were of various sizes, ranging up to that of a grape or even larger. In many cases the comparison to a grape was further suggested by the purplish colour of the semi-fluid contents of the cysts, but the majority contained thin, watery, or urine-like fluid. The size and number of the cysts are well shown in the accompanying illustrations reproduced from photographs for which we are indebted to Mr. H. G. Drake-Brockman. The pelves of the kidneys, the ureters, and the rest of the urinary tract were normal. The liver, spleen, and pancreas were normal. The heart was hypertrophied and dilated, especially the left ventricle; the

weight was 19 ounces. The cardiac muscle was pale and the valves were healthy. There were much œdema and hypostatic congestion of the lungs. The membranes of the brain were normal, but there was excess of sub-arachnoid fluid and the convolutions were shrunken. The right lenticular nucleus was occupied by a cyst of the size of a

FIG. 1.

FIG. 2.

The two kidneys have been cut open in the usual manner and folded back. Fig. 1, Outer surface of right kidney. Fig. 2, Inner surface of left kidney.

filbert, smooth-walled and containing turbid, yellowish fluid. No signs of old hæmorrhage were found in this neighbourhood and the cyst was judged to be possibly congenital.

*Remarks by* Dr. DICKINSON and Dr. FENTON.—Clinically this case, as is usual with cystic disease, presented many of the characters of granular kidney, and in the absence of a demonstration of the double abdominal tumour was regarded as being essentially of that nature. A point worth noting was the marked tendency to gout, which had not only been evinced for many years, but seemed to contribute in no small degree to the fatal result. According to recorded experience gout is quite exceptional with cystic kidney, whereas its frequent association with granular kidney is a matter of common knowledge. The recognised relationship between gout and kidney disease is one of cause and effect; but in this case it would seem that the relationship was reversed, or at any rate that the kidney disease—presuming this to have been congenital—predisposed to the gout which may have been more directly due to the habits of the patient. The maniacal excitement with which the case ended was certainly exceptional and may have been due to a metastasis of gout to the brain, but of this there was no post-mortem proof.

The pathology of cystic kidney can hardly be regarded as finally settled. A discussion of the various theories which had at that time been put forward, together with some observations of his own and a tabular review of 88 cases, are furnished by Dr. James Ritchie in the Laboratory Reports of the Royal College of Physicians of Edinburgh for 1892. Dr. Ritchie's essential conclusion, which, however, has not found general acceptance, is that cystic degeneration of the adult kidney is a kind of adenoma. Most authorities hold that the cysts are retention cysts and that in all probability they originate in obstruction and dilatation of the convoluted tubules of the kidney consequent upon an excess, and subsequently a contraction, of the connective tissue of the organ. A distinction is generally drawn between congenital cystic kidneys and those found in adults; the former being ascribed to faulty development or to intra-uterine inflammation, and the latter to acquired disease, similar to that which results in ordinary granular kidney, but consisting in a peculiar form of interstitial fibrosis. Dr. G. F Still, however, in the Transactions of the Pathological Society of London for 1898, adduces strong evidence in support of the developmental and non-inflammatory origin of all cases of cystic kidney, remarking that the renal changes are the same in the adult as in the infant, with a difference only of degree. According to Dr. Still, who follows Mr. S. G. Shattock, cystic kidney is the result of a developmental error whereby the mesonephros has blended with the metanephros, and the cysts originate not in the proper uriniferous tubules but in those of the Wolffian body. Presuming this view to be correct the general progressive and ultimately fatal nature of cystic kidney may be explained by the well-known tendency of organs which are congenitally malformed to become diseased; chronic inflammatory changes become superimposed upon the malformation, fibrotic contraction of the interstitial tissue which is already in excess takes place, and what remains of the true renal structure suffers in consequence, with the formation possibly of fresh cysts from obstruction of the urinary tubules.

# Medical Societies.

## PATHOLOGICAL SOCIETY OF LONDON.

*Bacteriology of Acute Emphysematous Gangrene.—Non-malignant Atrophic Scirrhus of the Breast.—Hæmangio-sarcoma.—Adenoma of the Suprarenal Body.—Sarcoma of the Stomach.*

A MEETING of this society was held on Dec. 4th, Mr. W. WATSON CHEYNE, the President, being in the chair.

Mr. E. M. CORNER and Dr. H. D. SINGER contributed a paper on the Bacteriology of Acute Emphysematous Gangrene (which must be distinguished from hospital gangrene and that associated with injury to the vessels), the substance of which is to be found in THE LANCET of Nov. 17th, p. 1408. In addition to the data already given in that paper Mr. Corner and Dr. Singer wished to emphasise two points: (1) the proved identity of the bacillus aerogenes capsulatus and the bacillus emphysematosus; and (2) that cases of the disease fell into two clinical series: (*a*) those due to mixed aerobic infection, of which a typical and anomalous case was referred to; and (*b*) cases due to mixed anaerobic infection of which typical and anomalous cases were also referred to. It seemed probable that these types of cases depended on the varying virulence of the different organisms such as was known to occur experimentally. It had been proved experimentally that there was a distinct series from the non-pathogenic organism up to an organism of the greatest virulence. Mixed anaerobic infections seemed to have a better prognosis than mixed aerobic infections. With the former a more abundant gas formation occurred and therefore they probably came under notice earlier. As regards the treatment, if the infection was recognised early free incisions should be made and the continuous bath administered. If this did not relieve then amputation should be performed. If, on the other hand, the infection was not recognised until a late stage had been reached amputation should be performed at once. Different people described different lines of treatment. This probably depended on the varying virulence of the organism. A number of cases had been recorded of amputation through the emphysematous tissue, but recurrence had generally taken place.—The PRESIDENT remarked on the interest of the subject. He had

not been successful in meeting with cases of the disease. He would like to ask whether Mr. Corner and Dr. Singer had referred to two separate bacilli as the cause of the gangrene and whether the different cases referred to were due to separate bacilli or were they only varying stages of virulence of the same organism.—Mr. C. A. BALLANCE congratulated Mr. Corner and Dr. Singer upon the interest of their communication. He should not be inclined to perform amputation before making a bacteriological examination, if there were means of finding the bacilli at hand. Mr. Corner and Dr. Singer had referred to the fact that Sir George Humphrys treated such cases without dressing. He would like to remark that that surgeon treated all his cases without dressing, leaving the wound exposed to the air. The results he obtained were comparatively good, bearing in mind that it was in the days before Listerian surgery.—Mr. CORNER, in reply, said that there were only three kinds of bacilli recognised. The bacillus aerogenes capsulatus was the commonest.

Dr. S. BONTOR read a paper entitled a case of Non-malignant Cancer of the Breast. The patient, who had died at the age of 77 years, had had the growth in the left breast 23 years. It never ulcerated or gave pain, but latterly there had been some inconvenience from the sense of constriction of the chest. There were several secondary deposits in the right breast and in the skin over the abdomen, but there were no enlarged glands or signs of involvement of distant organs. The growth commenced as a hard lump in 1877 when she was 54 years of age. The skin became very scaly. She died from asthenia. There had been many cases of chronic cancer recorded but all had ended from extension of the growth. This case showed no signs of extension or glandular affection. The cancerous nature of the growth was assured by both macroscopical and microscopical appearances.—The PRESIDENT remarked that the case was a typical one of atrophic scirrhus lasting a long time and besides the fact that there was no internal reproduction it did not present anything very unusual. He called to mind a similar case which had lasted for 14 years and then a sudden outburst had taken place. In another after an interval of nine years an acute outburst of carcinoma had occurred after an attack of influenza. It would be interesting to know what explanation there was of such long quiescent intervals.—Mr. BALLANCE referred to a case resembling that related by Dr. Bontor. The patient developed carcinoma at the age of 70 years in both breasts. The disease had no effect upon her general health and she did not die until she reached the age of 82 years. It was a well-known fact that carcinoma supervening in the aged was a process of slow growth.

Mr. ALEXANDER G. R. FOULERTON exhibited macroscopic and microscopic specimens from a case of Endothelioma (hæmangio-sarcoma) of the Breast and Axillary Glands. The tumour was removed from a woman, aged 59 years, in whom it had existed for three years. The breast and two axillary glands which were removed at the same time were of a uniform deep red colour. The new growth consisted mainly of columns or tracts of cells supported by fibrous trabeculæ. These cells formed the walls of a number of small capillary blood-vessels, from some of which extravasation had taken place. Mr. Foulerton regarded the tumour as an endothelioma of the variety known as hæmangio-sarcoma. He thought that the endotheliomata arising from the cells lining the large lymph sacs—the peritoneum, pleura, and pericardium, the lymph spaces of connective tissue, the lymph vessels, and the blood-vessels—formed a definite class of malignant new growth which might with advantage be classified as distinct from the carcinomata on the one hand and from the sarcomata on the other.—Mr. S. G. SHATTOCK suggested that the tumour in question should be referred to the Morbid Growths Committee; he thought that the specimens admitted of a different interpretation to that placed upon them by Mr. Foulerton. He referred to a case published by Mr. H. T. Butlin which presented a remarkable resemblance to that related by Mr. Foulerton. This was the first case published of villous carcinoma of the breast. He had examined the specimens very carefully.—Dr. A. F. VOELCKER quite shared Mr. Shattock's view. They were dealing, he felt sure, with a carcinoma and not with an endothelioma.—Dr. LAZARUS-BARLOW had examined the microscopical specimen and felt convinced that the growth was a hæmangio sarcoma, chiefly on account of the masses of cells around the blood-vessels which were essentially a part of the growth.—Mr. FOULERTON, in reply, remarked that when endothelium took on growth away from its normal environment it might become columnar.

Dr. W. C. BOSANQUET exhibited a Cystic Adenoma of the Left Suprarenal Body which had occurred in a woman, aged 56 years, who had been under the care of Dr. J. Abercrombie at Charing-cross Hospital. She had died from hæmorrhage due to carcinoma of the stomach. The cyst was originally of the size of a Jaffa orange; it lay behind the peritoneum in front of the left kidney with the descending colon to its outer side. The rest of the suprarenal body was adherent to its upper and back part. It was freely moveable in all directions. During life it had given rise to no symptom, the patient having been conscious only of some weight and fulness in the left hypochondrium. It was easily made out on palpation and there was diminished resonance on percussion over it. On incision the wall of the cyst was found to be about one-eighth of an inch thick and was tensely distended with turbid yellowish mucoid material. Microscopically the wall consisted of an external fibrous layer lined by a varying amount of cells similar to those forming the suprarenal cortex. The right suprarenal body was the seat of a small adenoma. A few instances of similar cysts were recorded in the Transactions of the Pathological Society; it was curious that those occurring in women were all situated on the left side.—Dr. VOELCKER remarked upon the fœtal rests found within the kidney having a structure resembling the suprarenal bodies.

Dr. HUGH THURSFIELD showed a specimen of Primary (?) Sarcoma of the Stomach in a child nearly four years of age. The child had growths which appeared later than that of the stomach in the jaw and in the thyroid gland. These could not be examined post mortem, permission being refused. The stomach was dilated and enormously thickened, the walls in some cases being fully three-quarters of an inch thick. Microscopical examination showed it to be a small round-celled sarcoma. Records of new growths of the stomach showed sarcoma to be very rare as a primary growth and uncommon even as secondary growths; the usual form that the growth took was that of isolated nodules rather than of a diffuse growth. Four cases had been recorded in the Transactions of the Pathological Society, and a stomach strikingly similar was preserved in the Museum of the Royal College of Surgeons of England, but with these exceptions there did not appear to be any specimen resembling the present on record and almost certainly none in so young a child.—Dr. VOELCKER drew attention to a case of sarcoma of the stomach recorded by Dr. Sidney Martin in the reports of the Middlesex Hospital for 1890 or 1891.

## NORTHUMBERLAND AND DURHAM MEDICAL SOCIETY.

*Exhibition of Cases and Specimens.*

A MEETING of this society was held on Nov. 15th, Mr. J. RUTHERFORD MORISON, the President, being in the chair.

Dr. D. DRUMMOND related the history of, and exhibited, a young man, aged 26 years, who eight months ago was admitted into hospital in a Condition of Extreme Lethargy and who had continued in this condition, displaying no sign of sensibility and no reaction to stimuli of any kind, until two or three weeks ago, when he first showed signs of consciousness of his surroundings and displayed return of muscular movement, first by masticating food and later by movement of the hand and arm and monosyllabic speech. During this period of seven and a half months the temperature, pulse rate, and respiratory rate were all subnormal; the reflexes were diminished. Nutrition had been maintained by feeding through a pharyngeal tube and by massage.

Dr. G. R. MURRAY showed a case of Paroxysmal Hæmoglobinuria. The patient was a man, aged 25 years, who had malaria five years ago and had also had syphilis. For the past two years he had worked as a river boatman. Two years ago, after having fallen into the water, he had his first attack of hæmoglobinuria, since when attacks had been frequent in winter and rare in summer. The man was now anæmic and displayed slight enlargement of the spleen. After exposure to cold he felt chilly, had aching pain in the loins radiating forwards, and passed only one small sample—two or three ounces—of dark porter-coloured urine. At these times the temperature rose to 101° F. During and after

attacks the red blood corpuscles were much diminished as compared with previous counts.

Dr. R. A. BOLAM gave a Lantern Demonstration of the Spectra of the various Pigments which might be observed in Specimens of Urine. With reference to Dr. Murray's case he demonstrated the pigment to be methæmoglobin and the deposit to contain large quantities of oxalates.—Dr. DRUMMOND, the PRESIDENT, Dr. T. BEATTIE, and Dr. BOLAM took part in the subsequent discussion.

Dr. VICKERMAN H. RUTHERFORD showed four cases of Lupus after Treatment by Roentgen Rays. The extent and duration of the disease had been variable and in one there was also consolidation of the right apex. Some of the cases had shown slight improvements but in none could he claim cure.—Dr. F. C. COLEY referred to another method of treatment—namely, that of sunlight, the heat rays being intercepted by blue glass. Recovery, in his experience, had been incomplete but gave an encouraging degree of success.

Dr. D. W. PATTERSON (for Dr. J. LIMONT) exhibited the following cases: (1) Morphœa; (2) Lichen Ruber Planus; (3) Figured Specific Rash; (4) Cheiro-pompholyx; (5) Dermatitis and Staining from Lyddite; (6) Fibroid Tuberculosis Cutis; and (7) Pityriasis Rosea.

Dr. H. B. ANGUS showed a patient after Plastic Operation on the Musculo-spinal Nerve—a boy who 16 months ago from fracture of the middle third of the humerus had his musculo-spinal nerve involved in the callus. Operation was performed three months ago; the nerve was freed, a strip of muscle being interposed between it and the bone. The boy now showed complete recovery from previous paralysis.

Dr. ANGUS also showed the result of Extensive Compound Comminuted Fracture of the Lower End of the Humerus. The patient was a boy who had sustained a year ago a severe crush in a coal-pit with extensive laceration of the soft parts, separation of the lower epiphysis of the humerus, and comminution of the diaphysis. He had been sent to hospital for amputation. Two inches of the shaft were excised and wired to the lower epiphysis, the wound having been cleansed as far as possible. A useful and almost perfect arm was the result.—A long and interesting discussion ensued as to the septicity or asepticity of coal-dust, in which Dr. J. ADAMSON, Dr. W. ROBINSON, Dr. MURRAY, Dr. A. H. DAVIS, Dr. I. G. MODLIN, Dr. H. P. BENNETT, and Mr. G. G. TURNER took part. The colliery medical officers alleged that dust from the virgin coal was aseptic.

Mr. J. D. WARDALE exhibited three cases illustrating Various Degrees of Involvement of the Orbit, some of which had been treated by excision and others by caustics, but all of which had recurred.—The PRESIDENT, Mr. A. M. MARTIN, and Dr. BOLAM discussed these cases, the last-named asserting that the reason for local recurrence in cases of rodent ulcer was that surgeons went wide rather than deep.

Mr. WARDALE also brought forward a patient who exhibited Double Dislocation of the Lens, the one forward into the anterior chamber and the other backward into the vitreous.

Dr. ANGUS (for Dr. G. H. HUME) exhibited a specimen of a Large Hydronephrotic Kidney from which 146 ounces of fluid had been aspirated previously to removal. There was a history of injury but he rather regarded the condition as congenital. The boy also exhibited two plates of cartilage at the sites of the third branchial clefts. His mother and sister had the same congenital defects.

Dr. BEATTIE exhibited two similar specimens of Enormous Sacculated Aneurysm which had both sprung from the anterior and convex surface of the junction of the ascending with the transverse arch of the aorta. The one had eroded and pointed through the manubrium sterni, the other through the ribs and costal cartilages to the right of the sternum. Both sacs contained a large amount of dense laminated clot and both specimens exhibited diffuse specific aortitis. The pressure symptoms in each case were related. The patients had died, one from increasing respiratory difficulty and the other from cerebral embolism.

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SOCIETY FOR THE STUDY OF DISEASE IN CHILDREN.—A meeting of this society was held on Nov. 16th at the Evelina Hospital for Children, Mr. R. Clement Lucas being in the chair.—Mr. Alfred H. Tubby showed an infant suffering from Imperforate Anus and Recto-Vaginal Fistula in whom an Anus had been Formed by Operation. When the patient was admitted in March last there was no anal orifice and the motions issued from the vagina. A probe was passed through the vaginal fistula into the distal end of the rectal cul-de-sac, and an antero-posterior incision was made through the skin and underlying tissues on to the point of the instrument. The rectal mucous membrane (exposed by enlarging the incision) was brought down with some difficulty and sutured to the edges of the skin wound. A large rubber tube was inserted into the orifice thus made. The sutures, however, gave way and the newly-made orifice contracted, so that three months later the operation was repeated and an excellent result ultimately obtained. No attempt had yet been made to close the vaginal fistula.—Mr. Clement Lucas, Mr. D'Arcy Power, and Mr. H. B. Robinson discussed the case.—Mr. Tubby also exhibited a Cavernous Angioma which he had removed from a male child, aged five months. It formed a firm mass, of the size of an orange, filling up the left side of the scrotum and extending to the external ring. It had a tough, elastic feel, without impulse or transparency, and diminished in size when steady pressure was applied. On its surface were some convoluted coils which gave the impression of large dilated veins. The testicle lay below the growth, the nature of which was not certainly diagnosed before operation. After removal the tumour was found to consist of venous sinuses embedded in connective tissue and fat. Its main blood-supply was derived from the left corpus callosum of the penis.—Dr. George Carpenter showed a boy, aged three and a half years, with many Subcutaneous Fibrous Nodules. There was neither a family nor a personal history of rheumatism; the child had not suffered from sore-throat nor did he present any evidence of cardiac mischief. The liver and the spleen were slightly enlarged. The nodules affected mainly the extensor tendons of the hands, feet, wrist, and ankles. They appeared at the age of 14 months, and since the patient had been under Dr. Carpenter's observation (September, 1898) they had increased in number. Galvano-puncture of individual nodules had been practised with a considerable measure of success, but no remedy had been found that prevented fresh nodules appearing. Radiograms had failed to reveal any changes in the bones. Microscopically a nodule had been found to be made up of fibro-nuclear tissue. He had met with at least three other cases of nodules without rheumatism, but they had not been under observation so long as the present one.—Mr. Clement Lucas exhibited by skiagram a case of Fracture-dislocation at the Elbow. The patient, a lad, aged 10 years, fell heavily upon his right elbow. There was a complete dislocation inwards of the ulna, which was rotated so that its greater sigmoid cavity faced directly outwards. In addition the end of the humerus was split obliquely so as to cut off a fragment consisting of the external condyle, the capitellum, and part of the trochlea. As the injury resisted all attempts at reduction Mr. Lucas (five weeks after the accident) excised the joint with a view to restore mobility to the elbow.—Mr. F. C. Abbott mentioned an almost identical case in a girl, 10 years of age, who had fallen upon her outstretched forearm, causing a dislocation of the radius and ulna backwards. Failing under an anæsthetic to reduce the dislocation he cut down upon the ulna, sawed through the base of the olecranon process, and found an oblique fracture of the capitellum and external condyle, which had united in a somewhat forward tilted position. Reduction was prevented by callus from that fracture. After gouging away some bone he was able to reduce both bones. The olecranon was then wired and the external wound closed. The patient had regained excellent movement with the exception of complete extension.—Mr. Sydney Stephenson showed, for Dr. Septimus Sunderland, a case of Hygroma of the Neck in a boy, aged three years. A swelling at the angle of the right inferior maxilla was noticed at birth. This had gradually become larger until the present time, when it had become as big as a medium-sized pear and extended to the clavicle.—Mr. Clement Lucas, Mr. Abbott, and others discussed the case.—Mr. Walter Edmunds showed a case of Unilateral Coxa Vara in a boy, aged eight years, who had been noticed to limp for about three years. The right leg could be flexed and extended fully, but abduction was limited. The pelvis was tilted, the great trochanter on the affected side was raised, and the right buttock was widened. A skiagram showed the neck of the right femur to lie at a right angle with the shaft of the bone and the upper part of the shaft to be slightly bowed outwards.—Dr. Wayland C. Chaffey showed an instance of Brachial Monoplegia in a newly-born infant with early rigidity. The facts of the case were as follows. The child, now aged four and a half

months, was admitted to the Children's Hospital, Brighton, a few days after birth, with complete paralysis and flaccidity of the right upper extremity. Although none of the other limbs were affected the child had been noticed "to cry on one side of its face." A large hæmatoma existed over the right parietal region and extensive bruises over the right side of the face. Spastic rigidity, which commenced about ten days after birth, had continued to the present time, being most marked in the muscles about the shoulder-joint. There were slight wasting of the muscles of the arm, distinct loss of response to the faradaic current, and Erb's reaction in the affected limb.—Dr. Henry Ashby, Mr. H. B. Robinson, Dr. Edmund Cautley, and others discussed the case.—Dr. Theodore Fisher read a short paper on Some Cases of Thrombosis of the Cerebral Veins in Children. The first case was in a girl, aged 14 years, suffering from ascites and cirrhosis of the liver. She had a succession of epileptiform fits, succeeded by right hemiplegia. About a month later she died from diphtheria. At the necropsy there was found thrombosis of the meningeal veins over the central part of the left hemisphere of the brain, with much softening of the convolutions. Thrombosis of more recent date existed in some of the veins on the opposite hemisphere and in the superior longitudinal sinus. A similar case was met with in a boy, aged two years, who died with symptoms of meningitis whilst in the hospital for noma. A third case occurred in a boy who succumbed to broncho-pneumonia, and a fourth in a child, aged eight months, who, admitted for summer diarrhœa, was seized with several attacks of opisthotonos and died in the course of three days. Thrombosis of the choroid plexuses and of the veins of Galen proved to be present. From the thrombus in the second case a bacillus was obtained and in the third case streptococci were present. In the fourth case cultures proved to be sterile, but Dr. Fisher thought that, all the same, streptococci or some other micro-organisms were probably present.—Mr. Clement Lucas and Dr. George Carpenter offered some remarks upon the paper.

KIDDERMINSTER MEDICAL SOCIETY.—A meeting of this society was held at the infirmary, Kidderminster, on Nov. 23rd, Mr. J. L. Stretton, the President, being in the chair.—The President showed a patient, aged 28 years, upon whom he had operated for Tuberculous Disease in the Apex of the Right Lung. For four years she had suffered from cough, expectoration, and sweats. Over the right apex as far down as the lower border of the third rib there was tubular breathing and crepitant râles could also be heard. The evening temperature was slightly raised and she had night sweats. The urine contained a trace of albumin. A three-inch vertical incision was made with its centre over the third rib and a portion of this rib was excised subperiosteally, about four inches in length. The lung was found to be very adherent and was separated with difficulty by the hand as far down as the lower level of the third rib. There was profuse hæmorrhage which was arrested by sponge pressure. The portion of lung separated was then surrounded with a serre-nœud and cut away, leaving a stump of about the size of a five-shilling piece. Adhesions made it impossible to fix the stump in the wound. 48 hours after the operation an attempt to remove the serre-nœud was abandoned on account of hæmorrhage. For some days after the operation there were considerable difficulty in breathing, constant cough, hæmorrhagic expectoration, and some bleeding from the wound. The breathing and the cough gradually improved and the hæmorrhage ceased after the seventh day. Some symptoms of septic action appeared on the fifteenth day, so a counter-opening was made in the back and a drainage-tube was passed through. From that date the improvement was continuous though slow. The wounds have soundly healed. There are no physical signs of disease. The expectorations have ceased—a specimen collected about a fortnight ago was examined for tubercle bacilli with a negative result—and she is gaining weight. The portion of lung which had been removed consisted of about a third of the right upper lobe and it contained a cavity. Mr. Stretton remarked that the chief difficulty of the operation was the presence of the adhesion. In future cases he would make a much freer separation, so that he could fix the stump in the wound; this would give more control over hæmorrhage and would lessen the chance of sepsis. He had adopted a vertical incision to give more room, as he had anticipated having to remove more ribs, but such ample room was afforded by the removal of one that in future he should make a transverse incision.—The President also showed: 1. A Hat-pin which he had removed from the Urethra of a Man, aged 55 years. It had been *in situ* for a week with the head downwards. By constant manipulation the patient had forced the point into the scrotum and was suffering from extravasation. The removal of the foreign body caused a subsidence of the symptoms. 2. A man, aged 40 years, who was suffering from the Remote Effects of Syphilis. He contracted the disease 14 years ago and had received no treatment. There were five ulcerated patches over the frontal bone exposing areas of carious bone; in one patch there was a communication with the inside of the skull.—Dr. J. Pole Kitson showed a Perforated Appendix removed from a boy, aged 13 years. The illness commenced on the Wednesday night, peritonitis developing on the following Saturday night, and on the Sunday morning the patient was quite collapsed. The operation was performed by Mr. J. Lionel Stretton at 2 P.M. on Sunday. The perforated appendix was found and was removed and the cavity of the abdomen was well sponged out and drained. The patient made an uninterrupted recovery.—Mr. Bywater showed an old man who had had a Sub-clavicular Dislocation for five weeks before it was reduced. He was now regaining his power of movement in the shoulder.—Dr. O. C. P. Evans read notes of (1) a case of Hallux Rigidus which after excision of the head of the metatarsal bone was followed by amputation of the toe without relief from the pain, but which was eventually cured by the removal of a portion of the internal tarsal branch of the anterior tibial nerve; and (2) a case of Chlorosis in which the pulse-rate of the patient, a girl, when she was admitted to the infirmary was 230.—Dr. B. Addenbrooke read notes of a case in which he had operated for Strangulated Inguinal Hernia. The patient was a boy, aged 11 years. On opening the sac it was found that the abdominal cavity contained pus, so the abdomen was opened in the middle line and washed out. The patient made a good recovery. A curious feature in the case was the development of parotiditis a few days after the operation.

SHEFFIELD MEDICO-CHIRURGICAL SOCIETY.—A meeting of this society was held on Nov. 22nd, Dr. E. Wearne Clarke, the President, being in the chair.—Dr. W. S. Porter showed a patient with symptoms of Ataxia with Romberg's Symptom well marked in whom the reflexes, superficial and deep, were exaggerated. There was no ankle clonus, no rigidity, no alteration in the sense of pain and touch, or in ordinary sensation except a sense of deadness at times underneath the feet. The electrical reactions were unaltered. There was no ocular palsy. The pupils were irregular at times and sluggish, though reacting to both light and accommodation. There was no myosis. The upper extremities were slightly affected. There was a history of previous shooting pains in the legs. There were no crises and there was no rigidity. A history of syphilis 23 years ago was elicited. Some of the characteristic symptoms of tabes were wanting and the exaggerated knee-jerks led Dr. Porter to call the case "ataxic paraplegia."—Dr. Arthur J. Hall read notes of two cases of Acute Yellow Atrophy of the Liver. One occurred in a woman who was not pregnant, aged 28 years; and the other in a young man, aged 20 years, a bricklayer. Both cases proved fatal, the first in 25 days and the other in 39 days. In neither case was leucin or tyrosin found in the urine after repeated and careful examination or even in that removed from the bladder post mortem. Urea was found in fair amounts. The necropsies showed the typical changes found in the disease. Inoculations from the liver and blood in one case proved sterile.—Mr. R. Favell showed a specimen of Extra-uterine Gestation. The patient, aged 33 years, who had been married for seven years but had never before been pregnant, was taken ill on Sept. 26th with hæmorrhage from the uterus and pelvic pain. There had been amenorrhœa for six weeks previously. Intermittent hæmorrhage continued until the operation on Oct. 21st. Among the physical signs was a round tender swelling lying midway between the left anterior superior iliac spine and the umbilicus. Per vaginam a soft and bulging mass was felt in Douglas's pouch. The pregnant tube and a quantity of clot were removed and the patient made a good recovery.—Dr. C. N. Gwynne read a paper on the Radical Cure of Hernia in Children with notes of over 60 "cases." Whilst admitting that the expectant treatment by a truss was preferable in a number of cases he contended that the

advantages which the radical cure conferred placed the method in the forefront in the treatment of the majority of cases that presented themselves at the out-patient department of the hospitals. The operation with proper precautions was a safe one and the percentage of failures was very small. Comparing different modes of operating he was in favour of that adopted by Lockwood, which was a modification of Bassini's operation. In the case of children he was in favour of a very simple operation which gave most excellent results, as evidenced by the fact that out of his 60 cases only one relapsed. By his method no dissecting out of the sac was necessary, with its attendant difficulties and danger to the structures of the cord. After the skin and superficial fascia were cut through he isolated the cord and raising up the sac with its surrounding tissues cut between two fingers right into the sac and with a pair of scissors opened it up to the external ring. He then incised it across and stripped it of the surrounding tissues from the inside, and completed the operation by tying the neck of the sac, cutting off the distal portion and returning the stump through the internal ring. The hernial aperture was then closed by sutures.

NOTTINGHAM MEDICO-CHIRURGICAL SOCIETY.—A meeting of this society was held on Nov. 21st.—Dr. Bell Taylor read a paper on the Successful Treatment of Cases which seem Incurable and cited instances of recovery of sight after many years (some upwards of 20) of apparently hopeless blindness. He contended that if the attention of the nervous system was distracted by baths, derivatives, and counter-irritants the supplies of materies morbi were cut off by diet and depletion. The specific element of the disease (gout, syphilis, or rheumatism) was stamped out by specific treatment, the faded nerves were galvanised into new life, and then, if necessary, such operative measures were resorted to as might be indicated, that not only would blindness be prevented but that also sight in many cases apparently beyond the reach of art would be restored.—Mr. A. R. Anderson showed a Ruptured Left Kidney which was removed by operation from a man, aged 48 years. The injury was probably caused by his falling on an axe while drunk. His clinical state on admission into hospital was as follows. There was great pain over the lower abdomen. The pulse was 120 and the temperature was 97° F. No urine had been passed since the accident, 17 hours before, but a little blood by the urethra. The abdomen was rigid, his breathing was thoracic, and there was tenderness all over the lower segment, especially on the left side, where fulness could be made out. The man had been vomiting. The catheter drew off three drachms of bloody urine, but distension of the bladder negatived rupture. There was no sign of external injury. An incision in the linea alba revealed the following. The bladder was intact. Some bloody serum was present in the peritoneum. There was ecchymosis of the mesentery, the left side of the omentum, and the meso-colon, with contusion of the descending colon and sigmoid. There was no rupture of the bowel. The posterior layer of the peritoneum in the left lumbar region was greatly bulged forward, extending down into the pelvis, and behind it was a large hæmatoma. The abdominal wound was closed and an incision was made for exposing the left kidney in the loin. On reaching the kidney the hand was passed into a large cavity from which more than two pints of blood, urine, and clot were removed. Free bleeding was going on from the renal pelvis, and the kidney was found to be split practically into two parts, crosswise, at its centre, involving both the ureter and the vessels. It was removed and after more clot had been taken from the large retro-peritoneal cavity this was washed out, a drain was inserted, and the wound was closed. The function of the right kidney quickly became re-established and the patient made a good recovery.—Mr. Anderson also showed: (1) A Cerebral Tumour—a small spindle-celled sarcoma occupying the left side of the pons; and (2) a Ruptured Tubal Pregnancy (two months) which had burst in the broad ligament.—Mr. W. M. Willis showed a Prepatellar Bursa, with thick walls having only a small cavity which was segmented by tough bands. Mr. Willis pointed out the futility of painting iodine over the skin in such a case. The bursa was removed owing to repeated attacks of acute inflammation.

BRADFORD MEDICO-CHIRURGICAL SOCIETY.—A meeting of this society was held on Nov. 20th, Dr. F. Farrow, the President, being in the chair.—Dr. Herbert C. Major was elected an honorary member.—Dr. J. H. Bell showed two Minute Books of the Bradford Medical Society, from 1835 to 1854.—Dr. T. Jason Wood showed a case of Erb's Paralysis. The patient was a man, aged 22 years. The weakness came on while he was carrying a stone weighing 40 lb. on his shoulder, but the symptoms were not fully developed till the end of 24 hours after the onset of the weakness. There were wasting and loss of power in the muscles moving the shoulder and elbow-joint. The extensors of the wrist and fingers were affected, but the power of flexion of the wrist and fingers remained. There was practically no affection of sensation. Tender points were present over the outer part of the deltoid muscle and in the bend of the elbow.—Mr. G. H. Moorhead showed a patient suffering from Erythema of the Abdominal Wall with a localised patch of gangrene which had followed repeated exposures to the x rays. The patient was said to have swallowed a nail and he had been exposed to the x rays with a view to localisation of the foreign body. There were three plates exposed on each of three days with an interval of a month between each exposure. 21 days after the last exposure the rash appeared and a gangrenous patch in the centre about one and a half inches by half an inch developed, which showed no signs of spreading or of healing. The eruption had not responded to any treatment.—Dr. C. F. M. Althorp showed a patient from whom he had removed a Thyroid Cyst of about the size of a tennis ball.—Mr. W. H. Horrocks showed one Lobe of a Hypertrophied Thyroid which he had removed.—Dr. A. Mantle showed four cases of Raynaud's Disease and alluded to two other cases which he had at that time under treatment.—Dr. R. H. Crowley showed the following specimens: (1) Aneurysm of the Left Ventricle of the Heart; (2) Tumour of the Œsophagus giving rise to no symptoms; (3) Melanotic Sarcoma of the Brain (secondary to primary growth of the skin); (4) Cancer of the Heart (secondary to primary growth of the breast); (5) Embolism of the Middle Cerebral Artery; (6) Large Infarct of the Spleen; (7) Tuberculous Ulceration of the Larynx; (8) Scales from a case of Rupia; and (9) very extensive Typhoid Ulceration of the Large Intestine and Ileum. One of the ulcers had perforated and the case had been treated by laparotomy. The patient died seven hours after the operation.—Dr. Wood showed the patient in, and read notes on, a case of Chronic Empyema treated by Thoracoplasty. The patient was a woman, aged 22 years. The empyema was first incised in January, 1898, and a second opening was made in July. In December of that year there was still an abundant discharge. An incision was made in the posterior axillary line and the posterior halves of the third to the ninth ribs were removed with the underlying thickened pleura. Further resections of ribs were performed in October, 1899, and in June, 1900, involving the removal of the ribs from the second to the ninth inclusive. The patient when shown was in good health, there was practically no discharge from the side, and there was very little deformity of the spine.

MIDLAND MEDICAL SOCIETY.—The first ordinary meeting of the session was held in the Birmingham Medical Institute on Nov. 14th, Mr. Jordan Lloyd, the President, being in the chair.—Dr. E. Malins showed a large Uterus which was removed by Abdominal Section after a Difficult Labour. The patient, aged 43 years, had been in labour some hours before a medical man was called in. The presentation was stated to be "a head, arm, and hand." Collapse followed and there were signs of rupture. Forceps were tried, then delivery was effected by turning. The whole front of the vaginal attachments, including the bladder, were found to be separated from the uterus. The left broad ligament was torn half-way up its depth and the right broad ligament three-quarters of its depth. The patient lived for 60 hours, dying from septic peritonitis. The uterus was remarkable for (1) the thickness of its walls (two inches); (2) the clearness of the placental site; and (3) the absence of Bandl's contraction ring.—Dr. T. S. Short read notes of a case of Subcutaneous Rheumatic Nodules occurring on the scalp of an adult. The patient was a woman, aged 29 years, who had developed the nodules six weeks before being seen; they ached severely and were tender, being present on the occipital ridges, the frontal ridges, and the temporal bone above the mastoid. There was no history of rheumatic joint trouble, but pains in the limbs had been present and the heart showed signs of early mitral stenosis. The nodules disappeared rapidly under

treatment. Although met with in children this condition was rare in adults.—Dr. W. G. Lowe exhibited an Iron Nut and Screw, with a Circular Piece of Bone, which he had removed by trephining from a man's skull. The man had been thrown out of a cart and had pitched on his head on the hard road upon the nut, with the result that the nut had passed through the skin, had punched out a piece of bone in the region of the occiput, and lay buried in the hole it had made in the skull, the circular punched-out piece of bone lying loose on the surface of the dura mater. The curious part of the case was that the injury gave rise to hardly any symptoms except a temporary dimness of sight and that the appearance of the wound aroused no suspicion that a foreign body had passed through it, this being discovered only at the time of the operation. A fracture of the bone only was diagnosed. The patient made a good though rather tedious recovery.—Mr. W. F. Haslam showed a preparation from a patient on whom he had recently performed Gastro-jejunostomy for Symptoms of Pyloric Obstruction. The man, aged 67 years, was greatly emaciated, and though no tumour could be clearly felt it was thought that the case was probably one of malignant disease of the pylorus. Puckering and thickening were felt in this situation at the operation, but the patient was in too feeble a condition for prolonged examination. He died five days after operation from broncho-pneumonia. At the necropsy the pylorus would easily admit the finger and there was an ulcer rather larger than a shilling of a simple nature in this position. The obstruction was evidently the result of violent spasm of the pylorus, due to irritation from the ulcer.—Dr. T. Wilson read a paper on the Varieties and Treatment of Prolapse of the Uterus and Vagina.

PLAISTOW AND CANNING-TOWN MEDICAL SOCIETY.—A meeting of this society was held at the Public Hall on Nov. 15th, Mr. R. J. Carey being in the chair.—After the formal business was disposed of Mr. J. J. Harvey read a paper on Dysmenorrhœa. He divided his cases into the clinical varieties of spasmodic, congestive, and obstructive dysmenorrhœa. The spasmodic form was often a neurosis, the pain being either clonic or tonic and most severe before the flow. The congestive form was commonly due to chronic endometritis and was generally associated with bladder and rectal troubles. The obstructive form was a frequent result of stenosis of the cervical canal, the pain being in direct proportion to the resistance to be overcome. Pelvic peritonitis and hæmatocele were remote effects. For treatment during the attack he recommended a combination of sedatives and anti-spasmodics with hot rectal injections. After the period treatment should be directed to remove any constitutional weakness, such as chlorosis, and a local examination should be made. He cited very successful results of dilatation by sounds, in some of which cases it was found necessary to keep in a stem pessary for a month after dilatation.—A discussion followed in which Dr. J. S. McDonogh, Dr. C. W. Taylor, Mr. Sydney Williams, and Mr. G. Charlesworth took part.

DERMATOLOGICAL SOCIETY OF GREAT BRITAIN AND IRELAND.—A meeting of this society took place at 20, Hanover-square, W., on Nov. 28th, Dr. J. H. Stowers, Vice-President, being in the chair.—Dr. P. Abraham showed a case of Lupus Erythematosus in a man, with very unusual distribution.—Dr. T. D. Savill showed: (1) A typical Adenoma Sebaceum in a young child; (2) a case of Molluscum Fibrosum (some discussion followed the exhibition of this case and an opinion was expressed that it might be classed as an instance of Von Recklinghausen's disease); and (3) a case of Xeroderma.—Dr. Russell Ryan showed: (1) A case of Psoriasis simulating a Syphilide; and (2) a case of Alopecia Areata which had apparently been cured within four months by treatment with a 10 per cent. solution of lysol.—Dr. Walsh showed: (1) A case of Symmetrical Tophi in an elderly man (these were of unusual size and some of them had broken down, forming abscesses); (2) a Senile Pigmented Wart on the Cheek of an old woman; and (3) a photograph of a case of Ichthyosis Hystrix.—Mr. G. Pernet showed, for Dr. Radcliffe Crocker, a case of Psoriasis of somewhat unusual aspect and distribution.—Several microscopical specimens were also exhibited.

THE "Croce di Benemerenza," or "Cross of Merit" has recently been conferred, among others, upon Mr. Francis Murphy, L.R.C.P. Edin., medical officer to the English Pilgrimage of Holy Year.

# Reviews and Notices of Books.

*Food and the Principles of Dietetics.* By ROBERT HUTCHISON, M.D., M.R.C.P. Edin., Assistant Physician to the London Hospital and to the Hospital for Sick Children, Great Ormond-street. With Plates and Diagrams. London: Edward Arnold. 1900. Pp. 548. Price 16*s.*

ACCORDING to the author's acknowledgment the appearance of this book is owing to the students of the London Hospital, since but for their encouragement it would never have appeared in its present form and so the author dedicates the volume to those to whom its contents in a series of lectures were first addressed. The lectures were given at the London Hospital some 18 months ago. The subject of food, its composition, and the principles of dietetics in health and in disease has been dealt with most comprehensively and we have read through the chapters with considerable interest. No pains in making the information accurate have been spared and this is especially apparent in the chapters devoted to patent and proprietary foods, the analysis of which, in a great number of instances, the author has undertaken himself or has had conducted at his own instigation. This section of the subject is one, of course, with which we are intimately brought into contact every day, the purveyors of new foods constantly submitting them for criticism and analysis to our analytical staff. Dr. Hutchison makes abundant references to the figures of analysis published from time to time by THE LANCET, and he acknowledges drawing considerable information in the chapter on Sherry from THE LANCET Commission on that subject. Again, he quotes a number of THE LANCET analyses of other wines, and especially those which are said to be suitable to diabetics and to the gouty. Information on these and related subjects is constantly in demand by general practitioners and Dr. Hutchison has placed this information conveniently at their disposal in the volume before us. He speaks with no uncertain voice of the special foods of various makers; when he can speak fairly and honestly of their merits he does so, and when he cannot he records what in his opinion are their demerits. We quite endorse his remarks on medicated wines. The use of malt and meat wines, he says, can on no grounds be recommended. In the first place, they are not worth the price charged for them, for it is far cheaper, and probably better, for an invalid to get beef or malt extract separately and to use them in conjunction with, if need be, a definite quantity of sound wine of reputable history; in the second place, as we have pointed out, it is open to doubt whether the malt ferment is not destroyed, so far as its digestive action is concerned, by the action of the alcohol to which it is exposed when dissolved in a fortified wine such as port or sherry. We have also explained that it is practically impossible to dissolve the nutrient matters of beef in a liquid containing as much alcohol as port wine does. Dr. Hutchison concludes that the manufacture and sale of medicated wines (coca wine, and others) should be strongly deprecated by the medical profession. In the chapter upon Spirits and Malt Liquors he very properly says that it would be a great mistake to regard spirits as simply mixtures of alcohol and water. This of course applies especially to genuine brandy, for it is well known that the stimulating influence of a real matured grape spirit is due to certain by-products of the type of ethers. On the other hand, whisky is a valuable stimulant where the action of alcohol pure and simple is desired. He speaks very strongly as to the importance of employing genuine liqueur brandy in cases presenting signs of profound nervous and cardiac prostration. We have advanced the same argument again and again in the columns of THE LANCET. Amongst the spirits which possess by-products of an ethereal

nature the author mentions pot-still whisky, rum, and genuine brandy, but on page 341 he says that it is the possession of volatile ethers in large amounts which mainly distinguishes brandy from whisky. That is the experience gained in THE LANCET Laboratory, and in modern whiskies we have never found any volatile ethers at all. In the chapter on Tea, Coffee, and Cocoa we note that he remarks that the addition of alkali (to cocoa) is a favourite device, especially with Dutch manufacturers. We doubt if this statement is generally correct. We at any rate have hardly ever found free alkali in cocoa, but we have almost without exception found the presence of an added salt which appears in the ash obtained by igniting the cocoa as carbonate of potassium. On page 140 in describing plasmon he says that it consists of the proteids of milk rendered soluble by combination with bicarbonate of soda. Although plasmon will be found to be distinctly alkaline, and especially a solution of its ash in water, yet no appreciable quantity of bicarbonate of soda will be found. This at least was our experience according to a recent analysis. The chapter on Soups, Beef Extracts, Beef Juices, Beef-tea, and Beef Powders is a very valuable contribution and Dr. Hutchison's remarks on the relative nutrient value of these food preparations should be widely known. The same holds good for the chapter on Artificial and Predigested Foods and Artificial Feeding. Broadly speaking the work may be divided into two parts: a first in which the composition of all classes of food is considered, and a second in which the principles of feeding in infancy, in childhood, and in disease are carefully discussed. We have said enough to show that the work may be cordially recommended as dealing most instructively with a subject which is not generally studied with that care which its importance demands. Nowadays we are presented with all manners and kinds of food-stuffs, some undoubtedly of value but others undoubtedly worthless, and it is important that all those who are concerned in the subject of dietetics (and who are not?) should have some reliable information upon which to found an opinion. From time to time we ourselves place this kind of information before our readers in our analytical columns as new preparations are brought forward. Dr. Hutchison has collected similar information in his book and the results are up-to-date and ably compiled, while his own views and experiences are entitled to careful attention and study.

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*The Opus Majus of Roger Bacon.* Edited by JOHN HENRY BRIDGES, F.R.C P. Lond., some time Fellow of Oriel College. Second edition. London: Williams and Norgate. 1900. 3 vols. Price 31*s.* 6*d.*

NEARLY three years ago [1] we noticed in these pages the appearance of Dr. Bridges's notable edition of the Opus Majus of Roger Bacon. The appearance of a second edition demands a further notice now. The second edition comprises besides the two original volumes a supplementary volume—the third—which gives the results of Dr. Bridges's further labours on the text. He has now collated it with a manuscript unpublished at the time when his earlier work appeared and has thus been enabled to make a large number of emendations. Considerations of expense have deterred the University publishers from reprinting the work, but its editor, with great public spirit, has given us the benefit of the latest lights by issuing a complete list of corrigenda in the form of an appendix to the new volume. The main bulk of the volume consists of a reprinted text of the first three parts of the work in which the emendations of these parts are incorporated. Possessors of the first edition will thus be enabled to complete their texts by merely purchasing the small supplementary volume which constitutes Volume III. of the new edition.

In our earlier notice of this work we directed attention rather to the later parts which deal with the physical sciences than to the three parts now published in an amended text. To these parts of the work our professional prepossessions naturally led us. But the parts now re-published, which deal respectively with the Causes of Error, the Relation between Philosophy and Theology, and the Study of Languages, are by no means wanting in interest from any point of view. Even a topic upon which we look so little for enlightenment from the thirteenth century as the bearing of science on religion yields unexpected interest in Roger Bacon's hands. What, for example, could be more suggestive than his comparison (p. 58) of Apollo with Æsculapius. In his view the deities of the pagans are distinguished men whom superstition has invested in later times with imaginary divinity. According to this theory Apollo was a profound philosopher who first among the pagans taught the art of medicine. All honour to him therefore. But to his son Æsculapius, who enlarged the art and taught it by a better method, still greater credit is due. "For," says he, "Apollo cured by means of incantations and remedies of that class but Æsculapius arrived at his art by experience." This sturdy faith in natural science, notwithstanding the commanding claims of magic and of revelation, is the groundnote of all Bacon's writing. It is on this basis that he claims preëminence for Aristotle, who procured authority from Alexander the Great to send 2000 men into various parts of the world to carry on researches into the nature of things, who cleared the errors of earlier teachers and extended the bounds of philosophy, aspiring to complete what the ancient patriarchs had left although unable in his single person to accomplish what he took in hand. "For," adds the author, "human discoveries never arrive at finality" (p. 66).

But we must not now pursue this theme since the work is too full of interesting points to be at all adequately exhibited by illustration in the space at our disposal. One word must, however, be added on the subject of the text. What we have above said will have given some indication of our sense of the indebtedness of scholars to the literary enthusiasm and public spirit which have prompted Dr. Bridges to undertake this labour of love. We should, indeed, regret it if any word of criticism should seem to belie our sense of this obligation or to mar the acknowledgment which we desire to make of a great service worthily rendered to the republic of letters. Yet we must confess to a wish that the editor had allowed himself a little greater freedom in the work of textual revision. At its best a Latin book is tiresome to a modern reader and Bacon's sentences are sometimes obscure. Often long, they are not infrequently rambling and tax the reader's attention to a point at which a consciousness of the mere words deadens his apprehension of the sense. But when to these difficulties there is added some corruption of the text of such a nature as to mutilate the sense the result is distracting. We have noted a peculiarly grievous example of such mutilation on p. 81 where a sentence, or rather words, occur which are destitute of meaning until the words "si quis autem" are supplied from a footnote. We recognise the literary piety which has made Dr. Bridges cautious to a fault in the work of restoring the text, and while we would not blame the temper we must claim the liberty sometimes to differ from him as to where in practice "the line" should be drawn.

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## LIBRARY TABLE.

*French Cookery for English Homes.* William Blackwood and Sons. 1900. Price 2*s.* 6*d.*—Good cookery means that food is prepared in an appetising manner and so, presumably, that it will be easily digested and assimilated. Therefore

[1] Scientific Error, THE LANCET, Jan. 29th, 1898, p. 320.

good cookery is an aid to health and so of importance to medical men. The book before us is obviously not one for beginners in the art of cookery and it appears to be a translation from the French, though the translator does not seem to have mastered altogether the intricacies of our language. In the first paragraph we read the following: "To those cooks who are desirous to accomplish their by no means unimportant work in a satisfactory and conscientious manner and who at the same time are not very experienced in cooking I should advise them before attempting to try any of the recipes contained in this work to read them first carefully through ....." This exordium appears to us to be a trifle superfluous, as well as inelegant, for we should imagine that a cook would naturally read the recipe through before starting to make the dish. The work is apparently compiled with a view to appealing to the capacities of experienced cooks, for a great deal is left to the imagination, as, for instance, in Recipe No. 36, *Quenelles for Soup:* "two tablespoonfuls of flour, two ounces of butter, yolk of an egg, *cupful of milk or water*." (The italics are ours.) Now a cup may be of any size from a coffee cup to a breakfast cup and there is absolutely no indication of the size meant. The same direction is given in No. 233—"a cupful and a half of stock or gravy." We are decidedly of opinion that any cook not having great experience could easily make a complete failure in following a recipe which alludes casually to *a cupful* of water, *a piece* of butter, or *a handful* of sugar. Setting aside this slight drawback the work contains some excellent recipes which should add greatly to the somewhat narrow range of middle-class cookery; there are many that are not to be found in other works of the same kind, and one of its good points is that it is adapted to the use of kitchens where economy has to be studied to some degree. We would especially commend to the notice of cooks the excellent recipes for gravies which, as the author very truly remarks, are generally the weakest point in middle-class households. "Dry soups" are too little known in England, and they form a delicious and highly nutritive variation from the ordinary soups. There is one recipe (No. 50) which we may mention in which the author has forsaken his usual moderation, "Risotto à la Milanaise," in which the cook is directed to "take 1½ lb. of rice," but there is a pathetic admission at the end that "this quantity is far too much for an ordinary dish."

## JOURNALS.

THE *Practitioner* for last month (November) has some unusually good original articles. Mr. Albert Carless discusses the surgery of the stomach in an able article, perhaps the most noticeable feature of which is the emphasis which he lays upon the decreasing importance in which we are rapidly coming to hold the stomach. It is not only that successful cases of complete gastrectomy grow ever less unusual, but the very large number of successful gastro-enterostomies, after which patients live in comfort and health for years, enforce upon us more and more the fact that we have hitherto given the stomach a place in the human economy which was far above its merits. Mr. Carless compares it to the camel's water-bag, but this is, perhaps, to rate the organ rather too low. Gastro-enterostomy for the relief of ulcer is, we feel sure, an operation that will be increasingly and deservedly favoured. Mr. Ernest Maylard writes of the treatment of intestinal obstruction in a manner that will be of great service to those whose practice forces them upon their own resources. He lays down most strongly the rule for early operation whenever peritonitis is diagnosed and the inadvisability of practitioners waiting for the possibility of a more detailed diagnosis. The importance of early operation in proper cases is similarly well shown by Mr. Herbert Allingham in an excellent contribution on appendicitis. Mr. Allingham has wisely eschewed statistics and authorities and has provided a simple and most valuable account of personal experience. His remarks on posture and the use of the rectal tube and of morphia in the after-treatment of appendix cases give practical aid of great service, and few practitioners will wish for a more helpful point of view from which to regard these common and important cases than that taken up by Mr. Allingham in his classification of the usual forms under which the disease appears. As regards the operation itself Mr. Allingham's views as to a low incision and a simple method of dealing with the stump seem well calculated to minimise the risk and, what is often of great importance, the time occupied in operating. The subjects of hernia and the surgery of the liver, the gall-bladder, and the bile passages are dealt with by Mr. B. G. A. Moynihan and Dr. James Swain. A concise little account of Oliver Goldsmith as a medical man of letters and the usual review of medical sciences complete a very good number of the journal. The discussion for the month upon topics of general medical interest deals with preliminary medical education and with medical men in the field of politics; the latter is a matter which is only too often disregarded by the great mass of practitioners in this country.

*Caledonian Medical Journal.*—The October number is occupied mainly with an account of the annual meeting of the Caledonian Medical Society, held at West Derby, Liverpool, on Oct. 3rd. The president of the society, Dr. J. R. Logan of Liverpool, delivered an interesting address on the Life and Work of Dr. James Currie, a noted Liverpool practitioner, man of letters, and social reformer in the end of last century. It was stated that the society now had 173 ordinary members and that the next meeting would be held in Glasgow. Lady Hughes, widow of His Excellency the late Dr. R. H. Gunning, an obituary notice of whom appeared in THE LANCET of March 31st, 1900 (page 973), has sent to the society "£25 for the founding of one or more Gunning Celtic prizes of the Caledonian Medical Society." The society has added £5 to this sum and now offers for general competition two Gunning Celtic prizes of the value of £20 and £10 respectively. The prizes will not be awarded until Jan. 1st, 1902. Competitors are allowed within a certain range to choose their own subjects, but a preference will be given to the following three: (1) ancient Gaelic medical manuscripts; (2) the influence of scenery and climate on the music and poetry of the Highlands; and (3) the origin, language, social habits, and traditions of the insular Picts. The secretary of the society is Dr. S. R. Macphail, Rowditch, Derby.

*La Grèce Médicale.*—In the November number Dr. Jean Foustanos, the editor, describes a case of retention of urine which had existed for 12 days. The bladder was five fingers-breadths above the umbilicus and resembled the uterus in the eighth month of pregnancy. Catheterisation having failed suprapubic puncture was performed and five litres (170 ounces) of urine were removed. Pyrexial catarrh of the bladder supervened, but the patient made a good recovery without symptoms of paralysis of the bladder or any other ill effect.

PREVENTION OF CONSUMPTION.—A meeting of the grand committee of the Gloucestershire, Somerset, and Wiltshire Branch of the National Association for the Prevention of Consumption and other Forms of Tuberculosis was held at the Medical School of University College, Bristol, on Dec. 3rd, under the presidency of the Lord Mayor of Bristol. It was decided to appeal to the public for funds to provide a sanatorium for the poorer class of consumptive patients between Limpley Stoke and Bradford-on-Avon. To build the sanatorium for 60 patients will cost £15,000 with £4000 a year for maintenance, but it is thought that the institution may become, to a very large extent, self-supporting.

# THE LANCET.

*LONDON: SATURDAY, DECEMBER 8, 1900.*


THE occurrence of an epidemic of peripheral neuritis, which clinical facts and chemical investigations seem to definitely connect with the presence of arsenic in beer, may serve to recall the fact that it is only within the last few years that peripheral neuritis as a definite and widespread clinical entity has been clearly recognised. It is true that isolated observations had previously to this time shown the existence of disease of peripheral nerves unassociated with any morbid condition of the central nervous system, but it was not until the labours of JOFFROY, LEYDEN, GRAINGER STEWART, BUZZARD, GOWERS, and others had elucidated the clinical phenomena and demonstrated the pathological changes occurring in a large number of cases in association especially with the excessive use of alcohol that "peripheral neuritis" or "multiple neuritis" passed into the everyday vocabulary of practising physicians. Since that time, now 20 years ago, much attention has been directed to the peripheral nerves and various new facts have been discovered connected with their morbid conditions.

The most common form of multiple peripheral neuritis is doubtless that resulting from excessive indulgence in alcohol. It occurs chiefly in spirit-drinkers, rarely in those whose attentions are restricted to beer. Women are affected much more commonly than men, and the habit of alcoholic indulgence which most readily induces it is the constant imbibition of small quantities, "tippling," and not the occasional heavy bout of drinking. The symptoms are, briefly, weakness or loss of power in all the limbs, with usually loss of deep reflexes and muscular wasting. The legs, as a rule, suffer first, and in slight cases alone, and there is excessive tenderness to pressure in the nerve trunks. In the most serious cases there is usually also psychical disturbance, especially impairment of memory and loss of correct ideas of time and place.

When it is remembered that the symptoms of chronic arsenical poisoning are in their chief features practically identical with those of chronic alcoholic poisoning and that identical parts in the peripheral nerves are affected by both poisons, it must be matter for congratulation that it was so early recognised that in the cases from which the presence of some additional poison was deduced there was something more than merely the usual condition of alcoholic neuritis. And it must be remembered that arsenical neuritis is a very uncommon disease. It comes under observation, as a rule, only in those rare cases in which arsenic has been used medicinally either for prolonged periods or in large doses, and the suspicion that arsenic was the cause of the multiple neuritis in the Manchester cases was apparently due to the associated symptoms of the excessive use of arsenic—viz., the characteristic brown pigmentation, the sickness and other intestinal disturbances, and the presence of cutaneous eruptions, and of symptoms of catarrh, especially of the eyes and nose. These symptoms may all be present without any evidence of an affection of the peripheral nerves, and conversely in rare cases, it is said, the peripheral nerves may suffer as a result of arsenical excess without any of these associated changes. But in cases in which the two are present together it is, of course, permissible to consider them both as the result of the same cause, especially if the indulgence in alcohol has been moderate, and still more if the alcohol that has been imbibed has been taken in the form of beer. Of course, there can be little doubt that in some cases the peripheral nerves have suffered from the double poison, the arsenic intensifying the neuritic effect of the alcohol and *vice versâ*. Indeed, it is not improbable that arsenic administered in an alcoholic menstruum may have a more powerful effect upon the nerves than when administered in another way. Such a supposition, of course, does not impair the main fact—viz., that arsenic is the effective poison, and but for its presence the paralytic symptoms would probably not have appeared.

The question has arisen as to whether in some of the cases the condition which was present might not be one of beriberi. This disease, essentially one of the tropics, is only known here as an occasional epidemic in workhouses or asylums or such places. It is a disease dependent upon the presence of an organism in the blood, but the morbid manifestations are chiefly in the areas of the peripheral nerves. It is probable that the organism in some way, by its action upon the blood or tissues, elaborates a chemical poison and this poison acting upon the peripheral nerves produces a condition of disease which is very similar to that produced by other chemical poisons, such as alcohol and arsenic. The manifestations of this diseased condition of the nerves are slightly different from those already referred to. They differ chiefly in the evidences which are present of profound interference with the vaso-motor functions, so that œdema of limbs, in addition to muscular weakness and wasting and nerve-tenderness, are present, and effusion into serous cavities is practically constant in all fatal cases. Fluid in the pericardium is very common and the disturbances of the heart and of respiration seem to indicate a special proclivity to suffer on the part of the vagus nerve. It will thus be seen that while there are marked resemblances there are also distinct differences between these various forms of peripheral nerve disturbance. The pigmentations, the cutaneous eruptions, and the catarrh are apparently distinctive in the arsenical cases; and there seems little doubt that to whatever isolated cases may be due the present epidemic is essentially one of arsenical neuritis.

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THE value of patience and persistence in medical service and the reward of those virtues with success in the saving of life have seldom been better illustrated than in the case which we published in THE LANCET of Nov. 24th (p. 1492) under the care of Dr. G. E. KEITH, and which he shortly describes as "Fourteen and a Half Hours' Artificial Respiration in a Child one week old; Recovery."

We may assume that our readers have read the remarkable narrative, but as, like all good clinical records, its value is in its details, which are easily overlooked in the strong general impression of the main facts, we venture to advise them to read it a second time. The patient was an infant seven days old, born prematurely by three weeks. On the seventh day (viz., August 27th) the operation of circumcision was performed. It is simply said of this part of the history that "the child did not breathe well under the chloroform. He lost more blood than usual." In these few words we have doubtless the secret of the condition which was soon to occupy all Dr. KEITH'S strength and ingenuity for 14½ continuous hours. The somewhat unusual features of the case were the slow development of the paralysis of respiration and the failure of heart power which caused the child to become cyanosed and to have repeatedly all the appearances of a dead child. We are not told the exact hour of the operation, but after it the child slept for some hours and awoke in the afternoon looking quite natural. But he did not care to take the breast and at 9 P.M. he became very wideawake and screamed for two hours. On being fed at 11 P.M. he took little milk and was very sick. He slept heavily till 3 A.M. of August 28th, when the nurse noticed that his face was cyanosed and took him to Dr. KEITH'S room, who found him very ill. Very soon breathing stopped entirely. The saving clause at this stage is that the heart was to be heard beating. Dr. KEITH immediately commenced artificial respiration, to which the child, happily, responded; but the improvement only lasted a few minutes, when the child was again apparently dying. The heart became very rapid, the colour was worse, and though artificial respiration was again commenced it was more "from a sense of duty" than from any expectation of success. And to this means of keeping the child alive Dr. KEITH devoted himself for the period of 14½ hours. At the end of 12 hours a very feeble attempt at inspiration was noticed. This was only once in a minute, but the intervals grew shorter and shorter; in another hour the child was inspiring entirely. There was yet no attempt at expiration, but the change in the condition of the patient was so marked that Dr. KEITH began to hope. In the course of the day a supply of oxygen gas was procured, and the constant play about the mouth of the oxygen produced a decided change for the better in colour, in the creaking sounds which had begun to be audible in every forced respiration, and in the strength of the heart beats. At 5.45 P.M. Dr. KEITH was able to discontinue, with an occasional exception, the artificial inflation of the lungs. But he was not yet free from anxiety, so he sent to London for an assistant to watch the case, which continued for four or five days to need the most constant and intelligent attention in the varying conditions which threatened life. At one time the child became very cold. He could not take milk-and-water or effectually seize the nipple. But he could take brandy-and-water of which he was given 20 minims every hour. He had screaming fits with offensive motions. On the 29th the temperature began to rise and on the 31st it reached 105° F. Antitoxin in grain doses was given twice and seemed to act antipyretically. On the interruption of the oxygen inhalation which, perhaps unjustly, was suspected of producing pyrexia, the cyanosis returned and the breathing became shallow. The last shock which this little patient gave to his attendants was so late as 4.30 P.M. on the 31st, when, suddenly, without the slightest warning and after one or two catches in his breathing, the respirations stopped entirely. Artificial respiration, oxygen, and brandy removed the grave condition, and thenceforward the child entered on his convalescence. The skin of the abdomen and upper part of the chest after the prolonged artificial respiration was "like raw meat," but the lesions caused by the successful efforts to save life did not long persist.

Patience and resource are qualities of the highest value to the practitioner. A practitioner without hope should not practise medicine. It is not often, of course, that he is rewarded by such direct life-saving as in the case to which we allude. Nor is it an everyday occurrence for him to meet with circumstances and symptoms so urgent and so apparently hopeless. But the good practitioner will try to anticipate such calls on his help. They are not, after all, rare. Every obstetric case has in it the possibilities of complications which tax all the perseverance of the medical adviser. There is no greater trial to the patience and ingenuity of surgeon or physician than dealing with hæmorrhage or convulsions, and no one of us can ever guess when he may find himself confronted with these symptoms in their most critical form. He is the best practitioner who can hope against hope, who can impose on himself the duty of employing the indicated remedies with perseverance where nature is equal to the task of healing disease with the kindly help of her true servant, the medical man. Such a case as the one recorded in our columns by Dr. KEITH refutes the scepticism of those who think that medicine has no power. Such scorners will perhaps tell us what the history of the case would have been without artificial respiration or oxygen or brandy and without the moral and intelligent qualities of the physician who used them in turn.

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AN inquest held recently at Mirfield in Yorkshire is worthy of note because it illustrates with unusual force and clearness the danger to the public arising from the immunity with which cozeners and impostors ply their trade as long as they extract money from their victims under the guise of healers of disease. The inquiry was held upon the body of the wife of an innkeeper whose death, according to the medical evidence, given after a post-mortem examination had been held, was due to cancer in the breast and secondary deposits in other organs of the body, it being also added, as might be expected, that had the unfortunate woman consulted a surgeon at an early stage of her disease a timely operation would, in all human probability, have saved her life. As a matter of fact, however, she had been attended by a "medical herbalist" who was called as a witness and who himself described the course which he adopted. It consisted in hypnotising his wife and asking her while in a state of trance to diagnose the case and to prescribe. This she appears to have done, stating that the patient was suffering from a cancerous tumour, that it would be possible to "scale it away," and recommending the use of an ointment and medicines

which the husband supplied. The "prescriptions" were produced in court, being apparently harmless concoctions of herbs, and it was further elicited that they were varied from time to time while the visits of the patient and the hypnotising process were repeated weekly. At some period during the progress of the disease the herbalist, according to his evidence, recommended the deceased to obtain other advice than his, recognising that the case was one of some gravity. He does not appear, however, to have refused to continue his supply of herbal compounds, and he stated in reply to an expression of natural astonishment on the part of the coroner that he honestly believed in what he did. The credulity of the victim and the effrontery or ignorance of the person claiming to diagnose and to prescribe for cancer by hypnotising his wife—without, by the way, making any personal examination—seem to have surprised the coroner, who, however, could only leave two questions to the jury: whether the death of the woman was accelerated by the treatment which she had received, and whether the herbalist had persuaded her from going elsewhere for treatment. An affirmative answer to the first of these questions would have justified a verdict of manslaughter, and we need not discuss the result of such an answer to the second, as the jury found a verdict of death from cancer, and were of opinion that no blame attached to anyone.

It is possible to wish that a trial at assizes could have followed and served as a warning to quacks at large. If, however, that which the herbalist did or omitted to do in this case did not legally justify a verdict of manslaughter it would be well if the law could be so amended as to strike at the root of the evil and to protect others besides those whose lives may be in danger. Police interference for the protection of the ignorant is not unknown where their pockets are in peril. If a gipsy beguiles a kitchenmaid of half a crown by promising her a dark-eyed husband and other ingredients of happiness we send the gipsy to prison because an Act of Parliament enables us to treat fortune-tellers as rogues and vagabonds. Anyone may deceive his fellow-men or fellow-women into parting with their money as long as he makes a pretence of healing disease and does not claim to possess certain defined qualifications which are not necessary to his trade. If, for instance, a man says or suggests falsely that he is a doctor of medicine in an English university he can be dealt with; but he may profess his contempt for the education implied by such a degree and proceed to trifle with the deadliest diseases with hypnotism, Christian Science, herbalism, and so forth, and no one can put a stop to his lucrative career, not even when the result of his intervention is the loss of a life that might otherwise have been saved. The law, in short, takes care of the kitchenmaid's pocket as long as she risks her money only; when she risks her health or her life as well as her money the law does not interfere.

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THE human mind is essentially hopeful and prone to optimism, and hence there comes about a tendency too readily to accept as established that which may at any given time be only a matter of inference. The history of medicine and of much of that which passes for science—surely HUXLEY'S view that "science is nothing but trained and organised common-sense" is a sound one—affords many illustrations of this faith, of a faith which clings tenaciously to the original position despite the evidence which has long since rendered such position untenable. When JENNER demonstrated that practically absolute protection against small-pox could, for the time being, be procured by vaccination, he allowed himself to predict, ere the time necessary for establishing such a proposition had elapsed, that such protection was lifelong. The reaction subsequently caused by the testimony of experience afforded the recalcitrant type of mind its opportunity, but now all sensible people protect themselves by vaccination and revaccination.

Again, when the idea of compulsory notification and isolation was first conceived there were enthusiasts who prophesied that by the application of these two principles certain diseases might eventually be "stamped out." At that time the natural history of infectious diseases was but imperfectly understood. Men thought that such diseases were the sole prerogative of the human race; they ridiculed those whose insight and genius led them to infer otherwise. Moreover, the idea that pathogenic organisms might have a saprophytic existence, or that the time spent by the organism in the human economy might be but a phase in the life-history of such organism, found no acceptance. The last decade of the century has, however, taught us that certain animals and insects may share in the propagation of disease, that pathogenic organisms may here and there maintain their existence in the soil, and that diseases are apt to have their variations in prevalence and intensity altogether irrespectively of what are commonly termed sanitary conditions. All these considerations have had their influence in modifying the position once taken up by those who spoke glibly of "stamping out disease," and now what may be termed the anti-isolationist is found declaring that isolation hospitals are not only useless, but are the centres of all sorts of horrors, so that it would be infinitely better to leave the infectious sick, as of yore, in their own homes.

We have before us a pamphlet written by Mr. E. D. MARRIOTT, a medical practitioner of Nottingham, which expounds this view. It would be useful if Mr. MARRIOTT and those of his opinion would consider the objects and scope of isolation hospitals before denouncing them. If inquiry on the point is made to the Local Government Board no reference to "stamping-out" will be found in the hospital memoranda of that Board. Curiously enough, however, in a Local Government Board report on the sanitary administration of Windsor which has recently reached us and of which a review will be found in our last issue we find crisp pronouncement on the matter. In the opinion of Dr. H. T. BULSTRODE, the author of the report in question, the objects of an isolation hospital are thus to be summarised: (*a*) to minimise the risks of infection from invaded houses to the remainder of the community; (*b*) to enable the sick to be separated from the healthy and the healthy to proceed with their occupation or education as the case may be; and (*c*) to provide for better medical control and nursing than is possible in the

homes of the poor. These claims—we have altered the order in which they occur in the report—seem to us to be very reasonable, and we think it is the duty of all sanitary authorities in the country to provide such accommodation for their districts. Those opposed to isolation hospitals may look forward to the day when the present system will collapse upon the heads of those who brought it into being, but we doubt if they will find public opinion any more than medical opinion upon their side. Because with advancing knowledge there is room for improvement in the administration of isolation hospitals is it reasonable to destroy the whole existing machinery—to leave the infectious sick in the milk-shops, in the common lodging-houses, in the houses of tailors and dressmakers? Yet this would be the logical course to pursue if isolation hospitals are to be regarded as foci of disease. The recent instance of the control of bubonic plague in Glasgow is surely a complete proof of the value of isolation hospitals. Would Mr. MARRIOTT prefer to revert to methods in vogue during the Plague of London, so graphically described by DEFOE? If a case of plague occurred in Nottingham to-day, would he have the invaded house shut up, the sick with the healthy, to let the dead be given to the dead-cart when the watchman's "Bring out your dead" was heard in the streets? Surely not.

# Annotations.

"Ne quid nimis."

## ARSENIC IN BEER.

IT is satisfactory to learn that throughout the kingdom very definite steps are being taken to stop the sale of arsenical beer. That this is a very necessary action is evident from the fact that arsenic has been found in the beer supplied at places comparatively remote from Manchester, where first the mischief arose and was recognised. A communication, for example, will be found in our correspondence columns from Dr. A. H. Bampton, in which he states that the medical men of Ilkley-in-Wharfedale, Yorkshire, have been greatly exercised during the last four months at the unusual number of severe cases of peripheral neuritis that have occurred there, and for the most part amongst beer-drinkers. The outbreak, like the one in Manchester, was traced to the use of arsenical invert sugar used in the brewing. We have examined a specimen of this sugar, which was found to contain just three grains of arsenious acid per pound, a result in accordance with previous analyses. From this it would appear that a glass of beer might contain one-fifth of a grain of arsenic. We have carefully examined this sugar in order to determine the form in which the arsenic existed. We have found it to be present mostly as arsen*ious* acid, but small quantities of arsen*ic* acid were also detected. Further mischief may therefore yet arise in fresh places. What, then, should be done in order that the public may be safeguarded? We venture to suggest that a special Government order should be issued instructing all county authorities to institute an analytical inquiry in their districts. This investigation could be conducted legally under the provisions of the Food and Drugs Act but it is a mistake to suppose that proceedings can be taken on finding arsenic in beer, at any rate in the first instance, for there is a clause in the Act which provides that guilty knowledge of the presence of an injurious ingredient in food or drugs is essential to the proof of offence. Once warned, however, the beer-seller may be severely punished if he attempts to sell beer which he is informed is contaminated. As we pointed out last week, this serious occurrence affords a fresh and startling argument for the interdiction of substitutes unless very definite steps are taken to secure the absolute purity of such substitutes. It is announced by some brewers that in future their brewings are to be the produce of malt and hops exclusively. If brewers themselves are led to make this announcement, doubtless by the fear of their beer being boycotted, surely there can be no further reason for considering the desirability of legalising a definition of beer—viz., that it shall be a liquor brewed exclusively from barley-malt and hops. We are glad to learn that Sir Cuthbert Quilter means to raise the question once more in Parliament as to the purity of ingredients used in brewing beer. It seems to us that the subject demands a wider scope of inquiry than in its relation simply to beer. The introduction of food substitutes on all sides requires a very complete, and searching inquiry, and, in our opinion, the substitute is so often a means to fraud that some very special legislation should be directed to this question. However expedient a substitute may be the public have a right to be protected from the deceit of being tendered a substitute in the place of the genuine article. Certain it is that substitutes are frequently not of the dietetic value of the genuine article, and therefore, as substitution becomes a general practice, which it fast threatens to do, it is not at all unlikely that, apart from the risk of substitutes containing poison, the general health of the public will, sooner or later, suffer. We trust that this view of the question will be very thoroughly sifted at the earliest possible opportunity and that the Government will allow ample time for the complete discussion of the subject. It is surely scandalous that an outbreak of wholesale poisoning must occur and human life apparently be sacrificed before any serious attention is brought to bear upon the purity of a national beverage. We may add that this is not the first time that arsenic has been found in beers manufactured from glucose, for as far back as 1878 it was reported in France that glucose used for brewing contained arsenic. In Germany the use of malt substitutes is absolutely prohibited. Why cannot the same salutary prohibition be enforced in this country—in which case beer made with substitutes would have to be called by another name?

## THE NEW PRESIDENT OF THE ROYAL SOCIETY.

ON St. Andrew's Day the presidentship of the Royal Society passed from Lord Lister to Sir William Huggins. The medical world is not only proud of Lord Lister's strictly professional work, but proud also of the fact that science has honoured him by placing him at the head of its leading representatives. There is no occasion now to do more than congratulate Lord Lister on his five successful years of office, and to record the fact that he proved himself an excellent and a genial president. His successor, Sir William Huggins, is less well known because his studies have related to a branch of science which, unlike medicine, has little direct influence upon mankind in general. But Sir William Huggins's work in astrology, using the word in its strict etymological meaning, has been of the most meritorious kind. His observations have considerably expanded our knowledge of the constitution of matter both in the heavens and on the earth. He has, indeed, brought to earth, so to speak, many of the facts concerning worlds millions of miles distant from us. He has studied in particular the spectra of the stars and, more than that, he has succeeded in getting photographs of these spectra. The results have been of the highest importance, not only in formulating

our conceptions of the chemistry of the cosmos, but also in establishing the relation in space of star to star and the direction of their acceleration. As Sir Norman Lockyer has said even the sun is nothing but a star and the stars are nothing but distant suns. Therefore it is incumbent upon students of such matters not only to investigate our sun, but to investigate the vast number of suns beyond—the suns, it may be, of other peoples. It has been said that to study our sun alone, without reference to the distant stars, which are equally suns, is like a reader confining himself to one book and that book, perhaps, not the best authority on the subject of, say, the geography of a country about which he was inquiring. Sir William Huggins, on the contrary, has read not one book but many books—i.e., has studied not only our sun but the suns beyond. Needless to add, the results have brought forward many interesting chemical and physical considerations. The investigations, too, have served to emphasise what a far-reaching instrument of search is the spectroscope—indeed, a spectroscope would appear to be positively indifferent to space. As Sir William Huggins has shown, it brings the far-off chemistry of greatly distant worlds within human and earthly ken. It is impossible to overrate the importance of Sir William Huggins's researches, and the Fellows of the Royal Society were aware of this when they very rightly invited him to accept the presidency.

## THE BENEVOLENT AGENCIES OF THE PROFESSION.

IT is difficult to understand why medical men do not support more generously their own benevolent institutions. That these are necessary is proved year after year by the long lists of applicants who await relief from medical charities such as the Royal Medical Benevolent College and the British Medical Benevolent Fund. We are not unmindful of the Society for Relief of Widows and Orphans of Medical Men, but admirable as this society is it is more in the nature of an insurance society than a charity, and further, its benefits are limited to those members of the profession residing within 20 miles of Charing-cross. THE LANCET Relief Fund, too, provided by the proprietors of this journal, is intended solely for emergencies. At the last May election of the Royal Medical Benevolent College there were no less than 23 applicants for pensions and 31 candidates for foundation scholarships, whilst the last annual report of the committee of the British Medical Benevolent Fund stated that many most distressing and deserving cases had been passed over from lack of means and that to others inadequate help only could be given. From time to time we print appeals in aid of families of deceased practitioners, but these appeals would not have to be made with such distressing frequency if the funds of the two charities referred to were more liberally supported by the profession. An appeal has just reached us on behalf of the Royal Medical Benevolent College, and the position of affairs is briefly though forcibly put by Dr. C. Holman, the treasurer. He says: "It is increasingly clear that the council must reduce the number of both pensioners and foundation scholars if the income of the college is not maintained. No one can defend the dispensing of charity out of borrowed money, which cripples the work of any institution in the future." As regards the British Medical Benevolent Fund we know that at present its funds are also exceedingly low, so that the scope of relief in the case of both institutions is crippled solely from want of money. How different would be the state of affairs if medical men, for whose benefit alone these two charities exist, would contribute with greater generosity than they at present do, or, when unable to give much, if they would but exert themselves to obtain contributions from the public who, as most persons are ready to grant, are under a debt of obligation to the profession. It is true that there are some who think that with the payment of their medical adviser's bill the debt of gratitude for services rendered is fully paid; but there are very many, we are glad to know, who, by means of thank-offerings to charities, are anxious to show that the settlement of the account cannot repay the grave anxiety, the risk, and the ceaseless toil which are the routine of every medical man's life. It may be argued that as medical men so frequently give their services gratuitously, as they make so many bad debts, and as year after year they find their incomes affected from various causes, they cannot be expected to give much in charity; but much is not expected from the average member of the profession. The council of the Royal Medical Benevolent College put the matter very clearly in their last annual report to the governors in the following passage: "It cannot be too clearly made known that small annual subscriptions are most welcome. Whilst granting that the medical profession is not wealthy it is unlikely that there are very many out of the 35,000 practitioners who are unable to subscribe 5*s.* or 2*s.* 6*d.* annually in aid of their poorer brethren." Then what can be advanced as the reason for the apparent apathy on the part of so many medical men? It cannot be that they are oblivious to the wants of their less successful *confrères;* and surely there are very few medical practitioners who can conscientiously state that they are unable to subscribe 5*s.* a year—a shade over 1*d.* a week—to these two important charities. The reason is more likely to be found in that habit of putting off matters which the pressure of medical work frequently engenders. How many of our readers have resolved time after time to send a contribution to one or both of these charities but have postponed doing so with the result that the contribution has never been despatched? No doubt many will grant that their procrastination has caused the oversight and to these we would appeal to defer contributing no longer, but to send a subscription, however small, to these excellent institutions. It should be borne in mind that an annual subscription of 5*s.* a year from every medical man would make the substantial income of £8750, and a subscription of half-a-guinea from only three-fourths of the profession would bring in £13,781 a year. To carry on the benevolent side of the Royal Medical Benevolent College a sum of over £6000 is required annually, yet the total of annual subscriptions received from all sources does not reach £3500. Will anyone contradict us when we say that members of the profession do not do what they ought to maintain their own charities? Needless to say it is with pleasure that we make this appeal, since few know better than we do the urgent need which exists for these two institutions and the amount of far-reaching good which is unostentatiously carried out. Both charities coöperate in order to prevent any chance of abuse, and in several cases the honorary officials of one institution are associated with the other. Our readers should remember that the old proverb applies here with especial force: *Bis dat qui cito dat.*

## THE SMOKE NUISANCE.

A NEW portion of the Midland Railway is in course of construction at Heaton Mersey, and a considerable amount of smoke is sent out "to the annoyance of" the person who brought the action "and the damage of shrubs and plants in his gardens," where, it appears, there are orchids to the value of £10,000, and other plants which had cost £5000 in gardens and greenhouses. The judgment given on Nov. 19th in the Lancashire Chancery Court is somewhat interesting. An interim injunction was obtained last April against the contractor and the ground of complaint was removed. The question was whether that action was maintainable. The Vice-Chancellor said that a casual

or temporary nuisance would not be interfered with. "It was not necessary that substantial damage should actually have been done, but the court would interfere if it could be proved that substantial injury would be caused unless the nuisance that was complained of was stopped." The unfortunate orchids were put out of court altogether, as, "the case ought not to be tested by the effect of the smoke on delicate exotics, but by its effect on an ordinary garden." He was satisfied that in this case the smoke was such that it would cause injury to an ordinary garden, so that the plaintiff was entitled to bring the action, the defendant must pay the costs, and if the occasion should arise the plaintiff could apply for an injunction. It really seems easier to obtain protection from smoke for the plants in a garden if they are only "ordinary," than for the people of some parts of our large towns who are apparently somewhat in the position of the orchids. It would be interesting to know if the Vice-Chancellor would look on human visitors from a tropical clime in the light of delicate exotics, and deny them protection because they were not "ordinary." It is said that in the well-known Crumpsall case Messrs. Levinstein are appealing against the decision by which they were fined at the last hearing of the case.

## A RETROSPECTIVE GLANCE.

THE *Westminster Review* of May, 1832, contains an article on "Improvements in Medicine and Surgery" which may be commended to the attention of the rising medical generation. "It is a fact capable of demonstration," says the reviewer of 68 years ago, "that since the healing art reached that point of cultivation which entitled it to the name of science disease has been gradually decreasing both in frequency and fatality. And it is equally capable of proof that the degree of perfection with which anatomy has been studied at any successive periods may be safely taken as the rule by which the progress of all the other branches of the science may be ascertained." Rejecting Sydenham's dictum as to the uselessness of "searching into the bowels of dead and living creatures ..... to find out the seeds of disease," the reviewer emphatically endorses "Baillie's assertion that 'the dead body is that great basis on which we are to build the knowledge that is to guide us in distributing life and health to our fellow creatures'"; and then proceeds to quote the statistics of Sir William Petty "who died," he informs his readers in a parenthesis, "about 150 years since." According to Petty, the proportion of deaths to cures in St. Bartholomew's and St. Thomas's Hospitals was in his time one to seven, whereas in 1741 the corresponding mortality had diminished to one in 10, in 1780 to one in 14, and in 1813 to one in 16. Finally, exclaims the reviewer, "out of 12,494 patients treated in St. Thomas's Hospital 259 only were buried, or one in 48." Some remarks of His Royal Highness the Duke of Sussex are next quoted, among them being the statement "that comparing the value of life as it is now calculated to what it was 100 years ago it has absolutely doubled." The Royal Duke then went on to expose how at one time "the entire half of our population were destroyed by one disease—small-pox." Typhus fever used to "slay one out of every three whom it attacked," but at the time of writing the mortality did not amount to one in 16. Measles, scarlet fever, whooping-cough, and consumption were no longer regarded with extreme terror. From 1799 to 1808 about 27 per cent. of those who became ill with consumption died, but during the succeeding lustrum the mortality fell to 23 per cent., and from 1813 to 1822 it still further decreased to 22 per cent. "As anatomy was more attended to," continues the reviewer, "surgery proportionally advanced. ..... The extreme clumsiness and cruelty with which operations used to be performed could scarcely be credited. Thus, Fabricius of Aquapendente, preceptor of the immortal Harvey, describes what he considered was an improved and easy operation. 'If it be a moveable tumour I cut it away with a red-hot knife that sears as it cuts; but if it be adherent to the chest I cut it, without bleeding or pain, with a wooden or horn knife soaked in aqua-fortis, with which having cut the skin I dig out the rest with my fingers.'" It would be interesting to know with what object the soaking in nitric acid was performed; did the illustrious surgeon thus prefigure the advent of antisepticism? It is a pity he does not say whether he soaked his fingers as well. A concluding observation by the reviewer seems to indicate an amount of knowledge on the part of a certain class of irregular practitioners with which it is not at the present day credited: "It is little more than 50 years ago when Mr. Sharpe, one of the most eminent surgeons of London, denied the possibility of the thigh-bone being dislocated at the hip-joint, an accident which occurs daily and which the merest bone-setter in the kingdom can now detect." The final paragraph of this instructive article is noteworthy: "But it were a task equally difficult and unnecessary to enumerate one-tenth of the achievements of modern surgery (*tempus* 1832); and it were superfluous to add that it is to anatomy, and to anatomy alone, that all improvements in this department can be traced." After three-score and ten more years have passed what will be the opinion of our successors regarding the achievements of modern surgery, *tempus* 1900?

## THE BOWEL LESION OF TYPHOID FEVER.

IN another column we publish an interesting article by Dr. T. J. Maclagan with the above title. The writer describes in graphic language the changes brought about in a Peyer's patch during an attack of typhoid fever. Now that in every infectious disease we expect to find a micro-organism in direct causal relationship with that disease there is a tendency to consider that the pathogenic organism is the sole cause of the lesions characteristic of the malady. Thus in pulmonary tuberculosis the bacillus of tubercle naturally holds the most prominent place, but we must not forget that other micro-organisms are responsible for the very active pulmonary disintegration which frequently occurs. So Dr. Maclagan points out that in typhoid fever elements other than the typhoid bacillus have to be contended against. The structures in which the pathogenic micro-organism directs its specific effects are the salivary and agminated glands situated in the submucous coat of the small intestine, and certain changes are thereby produced which essentially consist in proliferation of their cellular and granular contents, with consequent swelling and hardening of the glands. Further, this inflammation is generally sufficiently severe to cause gangrene and sloughing of the affected glands. Dr. Maclagan explains that the direct action of the typhoid bacillus is limited to the glands of the submucous coat and that it has no direct action on the mucous, muscular, or peritoneal coats. But the sloughing process which destroys the glands necessarily also destroys the mucous membrane situated over them. With the process of sloughing and suppuration there come into play other and new morbid agencies and the various forms of cocci associated with these processes. To these new agencies, rather than to the typhoid bacillus, Dr. Maclagan attributes all the more serious complications and all the formidable symptoms, general as well as local, which are apt to show themselves during the third and fourth weeks of the disease. We believe this view of the pathology and bacteriology of typhoid fever to be a sound one, and, as already pointed out, it is analogous to what is found in other diseases. It would likewise lend support to the treatment of typhoid fever by

intestinal antiseptics which some authorities so strongly recommend. In this connexion we may also call attention to the views expressed by Dr. Owen Paget in a letter which appears in this issue.

## ANNUAL REPORT OF THE IMPERIAL BACTERIOLOGIST TO THE INDIAN GOVERNMENT.

THIS report for the year 1899–1900 has just reached us and is a record of very varied work. The laboratory is, or possibly we should say was, situated at Muktesar, but in September, 1899, most of the buildings with their valuable contents were destroyed by fire and the work of six anxious years was within three hours all done away with. The report is chiefly taken up with experiments and investigations for the prevention of rinderpest. The subject is too intricate to be conveniently summarised here and the matter is not yet fully worked out, but the report shows that protective inoculation carried out with due consideration for the strength of the dose in proportion to body-weight will confer immunity for a period of between 70 and 80 days. Experiments were also made with the locust fungus, but up to the date of the report no data had been obtained on which to found an opinion as to the value of this method of killing locusts. A curious disease affecting horses appeared in Roorkee, but its pathology has not yet been made out. Major A. W. Dawson, I.M.S., attributes the symptoms and death to aconite poisoning. Various other diseases are dealt with, such as "surra," a complaint due to a trypanosoma but one of a different species from that which is responsible for the disease known as "dourine." The whole report will be found to be of extreme interest both to medical men and to veterinary surgeons.

## ST. BARTHOLOMEW'S, ST. THOMAS'S, AND BRIDEWELL HOSPITALS AND THE LAND TAX.

A VERY curious case has been decided by Mr. Justice Wills, the plaintiffs being the Lord Mayor and others, the Governors of St. Bartholomew's, St. Thomas's, and Bridewell Hospitals, who sought for and obtained a declaration that property known as Maidstone-buildings, Southwark, belonging to these institutions, is exempt from land tax, the difficulty of the question arising from the fact that for at least 120 years the tax had been paid apparently without demur by the tenants, except in 1835, when it was paid by the governors. The statute originally creating the land-tax (4 William and Mary, c. 1) was passed in 1692, "for granting to their Majesties an aid of four shillings in the pound for one year for carrying on a vigorous war against France," but "vigorous wars" and other calls upon the public purse caused it to be renewed from year to year until in the thirty-eighth year of the reign of George III. the impost was made a permanent one. The original Act, by its 25th section, exempted certain learned foundations and charitable institutions from the payment of the tax, and in particular it was not to charge "any of the houses or lands belonging to Christ's Hospital, St. Bartholomew's, Bridewell, St. Thomas, and Bethlehem Hospital in the City of London and borough of Southwark, or any of them." The following section possibly introduced some obscurity by making lands belonging to some of the institutions enumerated in Section 25 liable to pay the tax if let to tenants, and small verbal alterations were introduced in those Acts which renewed that of 1692 and in the Act of George III. mentioned above which did away with the necessity of renewal, while in respect of some of the foundations the lands exempted by the original Act were to be lands belonging to the "scites of the said Colleges, Halls, or Hospitals." On behalf of the defendant, the surveyor of taxes for the parish of St. Saviour's, Southwark, two principal points were raised—namely, that the payment of the tax for so long showed that the land in question had throughout been subject to taxation under the statutes and that the exemption on its true construction only referred to property belonging to the hospitals in the sense of supporting their actual buildings. With regard to the first of these points Mr. Justice Wills in a long and learned judgment declined to make the deduction asked of him, and with regard to the second decided in accordance with what seems to us to be provided in tolerably clear terms by the section, that the lands in question having belonged to the hospitals at the time when the original Act was passed are and should always have been exempt from land-tax, whether let to tenants or not. Why the tax was first paid at some time in or about 1780, or possibly before that, we need not speculate; presumably the persons asked to pay, not being connected with the hospitals except as their tenants, were not aware of the privilege accorded, and those who paid it in 1835 paid it as a matter of routine without reflection or inquiry. There is assuredly nothing surprising in the exemption and we are inclined to wonder whether any other charitable institutions may be contributing to imperial or local revenues in ignorance or forgetfulness of public or private Acts under which they might claim relief. It is on the face of it unjust, as we have often urged, that charitable institutions supported by public subscription as such should be burdened with the same payments as private individuals or wealthy corporations existing for the benefit of the members composing them. Hospitals pay rates under a statute passed in the reign of Queen Elizabeth, when charitable institutions did not exercise their benevolence on the same scale as to-day and when their needs were not so conspicuous. Nevertheless, a decision of the House of Lords in 1760 declared them to be exempt from the payment of rates and they continued to be so for more than a century. In 1866 another decision given in a case relating to dock companies declared that hospitals were rateable, and Parliament has never thought fit to rid them of the burden thus re-imposed upon them. It is interesting to observe from the case before Mr. Justice Wills that in the seventeenth and eighteenth centuries the legislature recognised the claims of charitable institutions and learned societies for consideration more fully than they are recognised at the close of the year 1900.

## POISONOUS GLAZED WARES.

A REPORT recently presented by the United States consul at Mayence includes a warning to purchasers of silvered glass and porcelain which ought not to be overlooked. The silver is applied to certain kinds of this ware by a galvano-caustic process which involves immersion in baths highly charged with cyanide of potassium. The surface thus treated is not perfectly smooth but is covered with innumerable fine cracks. In these the cyanide is absorbed and, it is said, cannot be removed during manufacture, although we should have thought, considering how extremely soluble cyanide of potassium is, that it could be easily washed out. As a natural consequence the use, even the handling, of the ware is apt to be followed by poisonous effects. One firm, it is stated, has abandoned this branch of manufacture because of the danger involved in it not only to the public but to the workmen employed. These glazed products are exported chiefly from Frankfort, Stuttgart, and Berlin. Until some non-poisonous means of plating the goods has been devised it is difficult to see how the very real danger which their use entails is to be avoided. No known process of after-washing can be relied upon to cleanse the minute cracks in the glaze, and even if this were possible, the position of the employés would not be improved. The German official authorities are not slow to interfere with manufactures which are proved to be injurious and they can doubtless be

trusted to deal with this matter effectively. In the meantime the purchasing public will do well to regard the timely caution which we have quoted from the *Times* and to abstain from buying the articles in question.

## ROYAL COLLEGE OF PHYSICIANS OF LONDON.

THE lectures at the Royal College of Physicians of London for 1901 will be delivered as follows:—The Milroy Lectures will be given by Dr. J. F. Sykes on Thursday, Feb. 28th, Tuesday, March 5th, and Thursday, March 7th, at 5 P.M.; the Goulstonian Lectures will be given by Dr. Henry Head, F.R.S., on Tuesday, March 12th, Thursday, March 14th, and Tuesday, March 19th; the Lumleian Lectures will be given by Dr. J. F. Payne on Thursday, March 21st, Tuesday, March 26th, and Thursday, March 28th; while the Croonian Lectures will be given by Dr. W. D. Halliburton, F.R.S., on Tuesday, June 11th, Thursday, June 13th, Tuesday, June 18th, and Thursday, June 20th.

## ISOLATION ACCOMMODATION AT COLCHESTER.

AN outbreak of diphtheria at Old Heath, a suburb of the borough of Colchester, has afforded opportunity for, or given rise to, a far from edifying discussion in the local press between Mr. Edgar Hunt, a medical practitioner, and Dr. George Brown, the medical officer of health of the borough. Other medical men have found themselves involved in the controversy and the general result is not, we fear, calculated to enhance the regard in which the medical profession is held in East Anglia. The correspondence, which occupies many columns of one of the local newspapers, can fortunately be briefly summarised. The isolation hospital, as far as we can judge from the several letters, is not up-to-date, and hence, among other things, it has been unable to cope with the demands recently made upon it. But this is not all. It is affirmed by Mr. Hunt that there is no proper disinfecting apparatus available, an allegation which in our view is sufficiently serious for a town of the size, importance, and obvious aspirations of Colchester. It is difficult to comprehend how a body of enlightened popular representatives, such as we imagine the members of the Colchester Corporation to be, should in these days regard it as consistent with their duties to leave their district without the modern facilities for isolation and disinfection. The treatment meted out to the patients at the fever hospital has been called in question, and this matter has perhaps unduly prolonged the correspondence above referred to. Mr. Hunt was anxious to obtain a written statement from the medical officer of health as to whether or not it was his practice to make use of diphtheria antitoxin at the hospital, and seeing that the destination of the reply was presumably to be the local newspaper the medical officer of health was not unnaturally averse to be thus catechised. There can hardly, we think, be any doubt in the minds of the medical profession in Colchester as to the great value of diphtheria antitoxin, especially when it is used early in an attack, and it is to be feared that the public debate which has taken place upon the subject in the press of Colchester may have produced a somewhat erroneous impression upon the minds of those who have followed the controversy. The pages of THE LANCET and the reports of the Metropolitan Asylums Board will afford a good estimate of the true position with regard to this remedy. Mr. Hunt is anxious for a Local Government Board inquiry into the outbreak of diphtheria, and presumably, also, into the administration of the hospital, but perhaps the exercise of a little common-sense and an adaptation to the necessities of the situation might obviate such a course. We see that references are made to the water-supply of the invaded areas in relation to the outbreak, but it may be well to point out that water-borne diphtheria is by no means a common occurrence, and that time might be better occupied in a house-to-house inspection with a view to searching out and controlling cases of suspicious sore-throat. If the hospital staff and the accommodation are inadequate they should be promptly increased.

## MALARIA AND MOSQUITOES.

AT a recent meeting of the Society of Arts at which Professor Ray Lankester presided, Major Ronald Ross, I.M.S., read a paper upon Malaria and Mosquitoes. After giving an account of the symptoms and course of malarial fever he proceeded to discuss the subject of prevention. Measures of prevention might be either public or private. The latter he would not discuss, but the former demanded examination on the ground of expense, for municipalities and the like authorities should not be required to spend money without there being a good prospect that the sums laid out would not be wasted. Koch's theory that mosquitoes should be let alone but that people should be cinchonised Major Ross considered as impossible to put into execution in a British colony, such as, for instance, Sierra Leone. The best method in his opinion was destruction or removal of the mosquito by means of surface drainage, cutting down undergrowth, and the use of various culicides. In our opinion Major Ross's ideas are very sound. The experiments of Sambon and Low seem to show that in Italy at all events immunity can be obtained by living in a mosquito-proof house between sunset and sunrise. They also apparently demonstrated the fact that the Italian mosquito does not bite during the day or possibly that the malaria-carrying variety only bites at night. But other experience would point to the fact that the extirpation of the mosquito would be the most effective measure of protection. In some countries mosquitoes bite viciously all through the day, as, for instance, in Lapland and in the Araxes valley. In the latter locality mosquitoes exist literally in millions, and are much more troublesome by day than by night. A medical man who travelled through this valley in 1884 was severely bitten during the day but only rarely, if at all, at night. Though he had never had any symptoms of malaria while away, some 18 months after his return, while hard-worked at a hospital, he developed sundry [severe attacks of hæmoglobinuria, presumably due to malarial infection. A mosquito-proof house would have been no good in this instance, but a reduction in the number of mosquitoes would undoubtedly be of benefit.

## THE DIFFERENCE BETWEEN A FRESH EGG AND A NEWLY-LAID EGG.

NINE times out of ten the trader, we fear, conveniently ignores the question of the difference between the newly-laid egg and the fresh egg, his concern being only to realise the best prices for his eggs, to which end he keeps them dubbed "new-laid" or "fresh" as long as he can before they become obviously "shop 'uns." A species of fraud is thus being commonly practised upon the public and it would be very satisfactory if some definition could be established which should sharply require the assortment of eggs into three classes, to be respectively known as "newly laid," "fresh," and "shop." A difficulty at once arises as to when an egg may fairly cease to be considered newly laid and when it has entered upon the "fresh" stage. There can be no doubt of the dietetic difference between an egg, say, one day old and another a week or more old. From the moment it is laid the egg, it is certain, undergoes definite changes of the precise nature of which we are ignorant, but which nevertheless affect the dietetic value of the contents. Eggs when kept, as is well known, gradually lose water by evaporation, and water is an essential constituent of the albuminous fluid. Indeed, the loss of water thus occurring is sufficient

to make the egg lighter and on this a test has been established as a means of differentiation. A fresh egg, it is said, should sink at once in a 10 per cent. salt solution, but the longer it has been kept the nearer the surface will it float. Perhaps by carefully studying this phenomenon we may be able to determine the exact age of an egg, and if once it is accepted that a newly-laid egg shall be an egg not more than 24 hours old some system of control over the sale of eggs "newly laid" as distinct from the "fresh" and "shop" descriptions might be inaugurated. Such an instrument, giving very exactly the density of an egg, might conveniently be called the "ooscope." Some attempt at guaranteeing the history of an egg has been made by branding upon it the date upon which it was laid, but obviously this method can hardly be relied upon. One thing is clear: there is an important difference between an egg that is newly laid and one that is comparatively speaking "fresh." One essential point is that a newly-laid egg when boiled is milky or creamy as regards the white part of it, whilst an egg commonly spoken of as fresh but which is not newly laid furnishes on cooking a white that is transparent or, more correctly, slightly opalescent. Many attempts have been made to preserve eggs in their newly-laid state, but such preserved eggs never satisfy this test of a newly-laid egg. The question is a very important one, especially at a time when eggs are scarce and when it is probable that fraud in regard to palming off fresh eggs as newly-laid eggs is practised with some frequency. The question is also important in relation to foreign competition, for undoubtedly foreign eggs which are imported into this country are often sold as newly-laid eggs. We cannot help thinking that home producers and the trade generally could if they chose usefully combine their energies and skill towards providing a means which would enable the public to obtain some guarantee that the egg purchased is really newly laid. Certain it is that persons would pay a high price for the really newly-laid egg rather than have an egg which could in no sense be regarded as newly laid thrust upon them at a lower price.

## THE COLLECTION OF INFANTS' URINE AND FÆCES FOR ANALYSIS.

IN the *Deutsche Medicinische Wochenschrift* of Oct. 18th Dr. B. Bendix and Dr. H. Finkelstein describe a contrivance which they have found very satisfactory for the separate collection of the urine and fæces of infants, when analyses have to be made, as in the course of investigations on tissue change. Nearly five years ago Dr. Bendix introduced an arrangement for the same purpose which answered perfectly well provided that a constant watch over the movements of the infant was maintained both by night and by day.[1] Dr. Bendix and Dr. Finkelstein eventually employed a considerably modified arrangement which they have found to be perfectly reliable and which has the advantage of not requiring constant supervision. The child lies on a stout sheet which is stretched between the top and bottom rails of a cot and which is torn in half from the foot to the centre. The inner edge of each of these halves is turned outwards on itself and fastened to the outer border of the sheet, so as to make two hollow cones like legs of a pair of drawers tapering to a point. An ordinary woollen combination garment with the buttons in front is then stitched to the sheet, in such a way that the seam begins in the middle line at the level of the angle of the scapula and on coming to the small of the back it divides and is carried on each side to the back of the knee. The back opening of the woollen drawers must correspond exactly with the commencement of the division in the sheet, the legs being carried into the folded halves of the sheet already mentioned. When the infant is put into the combination garment the upper part of the body and the arms are quite at liberty and the child has also considerable freedom of motion for the legs. To prevent the gluteal region from slipping down and to make the whole arrangement steadier the under surface of the sheet as far as the small of the child's back is supported on pillows, so that the upper part of the body is always horizontal. A waist-belt, having a number of buttons and held up by braces, is also provided. The urine is caught by means of a glass vessel, in shape not unlike the glass "adapter" used in chemical laboratories. At one end it is large enough to receive the penis and scrotum and suddenly tapers to a small tube which passes into the neck of a bottle. The wide end is encircled by an indiarubber ring from which two indiarubber straps proceed in front and two behind, all four being buttoned to the waist-belt. The fæces are caught in a pan placed underneath the sheet. All the parts of the apparatus may be obtained from Mr. Ernst Lentz, 18, Birkenstrasse, Berlin.

[1] Jahrbuch für Kinderheilkunde, 1896, vol. xliii., p. 23.

## THE CAPE OF GOOD HOPE COLONIAL BACTERIOLOGICAL INSTITUTE.

THE report of the Director of the Colonial Bacteriological Institute at the Cape of Good Hope for 1899 is full of interesting reading. By far the greater portion of the report deals with the question of horse-sickness, which is a perfect scourge to horses, asses, and mules in South Africa. Dr. A. Edington has succeeded, after a long series of experiments, in devising a protective method of inoculation, the technique and results of which are set out at length in the report, but as last week we were enabled to lay before our readers a paper upon the same subject by Dr. Edington we need refer no more to the subject here. Another matter referred to in the report is that very fatal disease amongst cattle—namely, redwater. A method of protection against this malady by means of a protective virus has also been devised by Dr. Edington and "continues to find favour with the stockholders in infected areas." Experiments have also been made with the "locust fungus" for the destruction of locusts with most gratifying results, but, unfortunately, the funds provided for the support of the five travelling instructors proved quite insufficient and they therefore had to be withdrawn. Owing to farmers and others whose interests were involved carrying out the campaign of destruction in a half-hearted way the results have been much less successful since the withdrawal of the instructors. The institute supplied in addition vaccine lymph, diphtheria antitoxin, and sundry other viruses and vaccines for protection against "lung sick," anthrax, and the like. Bacteriological examinations into various pathological tissues, suspected milks, blood, and water were made to the number of 138.

## "CONSUMPTION SANATORIA" IN SCOTLAND.

WE have just received the report for the year ending October, 1900, of "Consumption Sanatoria for Scotland." These homes are situate at the Bridge of Weir, Renfrewshire, and form a portion of the many philanthropic establishments inaugurated under the auspices of Mr. Quarrier. At present there is no accommodation save for women patients, and, as the report points out, there is sore need for a like establishment for men who are in general the bread-winners and whose illness therefore presses hardly upon their families. During the year with which the report deals there were 81 cases admitted and at the end of October, 1899, there were 25 patients remaining in the home, making a total of 106. Of these 66 were discharged after an average stay of 134 days, as compared with 56 discharged in 1899 after an average stay of 156 days, while 40 were under treatment at the end of October. The method of treatment adopted is

that in vogue at similar institutions—namely, full diet, an open-air life, and strict personal supervision with attention to rest and exercise. The results, says the report, are very encouraging. Of 60 patients 12 are returned as "cured." This term, however, is only to be taken provisionally at present. Under the heading of "almost well" 17 patients are returned, 15 were "very much improved," 10 much improved, five "slightly improved," and in one the condition remains unchanged. Inquiries into the after-condition of patients since the opening of the establishment in 1896 show that 44 maintained the improvement, 13 relapsed, five were much worse, five were lost sight of, and 17 died. The report rightly urges upon both patients and medical men the necessity of applying for treatment at an early stage in the disease. The Scottish sanatoria are perhaps not so well known as they should be on this side of the border, and we are glad to be able to put on record the good work which it appears that the Bridge of Weir Homes are doing.

## PAINTERS AND LEAD POISONING.

THE prevalence of lead poisoning among house painters and decorators is an old-standing evil, yet comparatively little has been done to mitigate it. In zinc there is to be found an excellent and a harmless substitute for lead, though it has not the "covering" power of lead; but it seems most difficult to break down trade customs and prejudices. In the manufacturing processes some improvements have been realised, the lead being now generally pulverised in closed receptacles so that the lead-dust does not fly about. Nevertheless, the cases of lead poisoning are still very frequent. In Paris the public authorities supply gratuitously sulphurous baths to all workers who manipulate lead. The expense which this occasions is more than compensated by the reduction in the number of days spent in the public hospitals by persons suffering from lead poisoning. But on the ground that prevention is better than cure the French painters recently held a congress which was attended by representatives of their trade in the principal towns of France. At this congress resolutions were carried denouncing the use of lead for the manufacture of paint and demanding that the law for compensation for accidents should be extended so as to apply to all cases of lead poisoning. So old is this grievance that in the reforming days which followed the revolution of 1848 a decree was promulgated by the French Government forbidding the use of carbonate of lead. Though this decree bears the date of August 24th, 1849, it has never been enforced. The Congress appointed a commission of five members to organise an agitation against lead paint and they held a first conference on Nov. 3rd last. The directors of two large Paris firms engaged in the manufacture of paint were present, as also was a representative of the Government, M. Alby, civil engineer. M. Finance, formerly a painter and now director of the Bureau of the Trade Associations at the Labour Office, contributed a paper full of statistics and technical information, setting forth the evils resulting from the use of lead and how easily zinc might be employed in its stead. Then the painters' delegates proceeded to interview the Minister of Public Works, asking him to enforce the decree of 1849, at least in regard to all work done for the State. The Minister gave a favourable reply and declared that henceforth only zinc should be employed in all State work. This was a good beginning and is an example which the British authorities might well follow. The representatives of the painters subsequently proceeded to the Ministry of Commerce and placed the resolutions which their congress had adopted in the hands of M. Millerand. The Minister replied that the Law on Accidents though but recently enacted was still imperfect. It was nevertheless too soon to hope for its amendment. In the meanwhile, and in accord with his colleagues in the Ministry, he would do all that was necessary to enforce the decree of 1849 so that no more lead should be employed for the painting and decorating of State edifices. He hoped that the local authorities would follow the example given by the State, then it would only be necessary to persuade private employers to substitute zinc for lead. Thus it will be seen that this question has recently made good progress in France. We wish we could say as much in regard to Great Britain.

## THE POISONING OF BEER IN MANCHESTER: A REPORT BY DR. NIVEN.

DR. J. NIVEN, the medical officer of health of Manchester, has presented a report to the hospital sub-committee dealing with the present outbreak of arsenical poisoning in Manchester. In his report he states that he first heard of the epidemic through Dr. E. S. Reynolds, who on Nov. 20th informed him that arsenic had been found in a sample of beer. At that time there was a large number of patients in the wards of the infirmary exhibiting a definite set of symptoms, and these patients, who had been admitted for some months previously, were all beer-drinkers drinking the cheaper kinds of beer. We shall publish the report in full next week.

## ASEPTIC HAIRDRESSING.

WHETHER it be in the "Barber's Chair" in England or under the ministrations of the "*Figaro*" in Spain, hairdressing and shaving have always been associated with gossip and the exchange of ideas. But it is the rôle of the hygienist to step in and to indicate the evil consequences that may result from pleasant things. Even "*Figaro*," razor in hand, succeeds in "suggesting" Don Bartolo into a high state of fever; and the promiscuous use of razor, scissors, combs, and other implements by the hairdresser has on more than one occasion been denounced as a probable source of infection. Of course the better-class hairdressers are careful to keep all their instruments clean; but, as a rule, these are not cleaner than surgical instruments used to be before the days of antiseptic surgery. The question now arises whether a barber should not be as scrupulous in this respect as the operating surgeon. As barbers used to be surgeons they can only be flattered if to-day we draw their attention to the modern practices observed by surgeons. Nor is this a mere suggestion. The medical students and others of the Latin quarter in Paris have actually succeeded in conveying to hairdressers the lessons which they have learnt in the operating theatres of the hospitals. There are now several hairdressers in Paris who have adopted antiseptic methods. Nor does this occasion any particular trouble or expense. In front of each chair there is a gas-burner. Bone or celluloid combs are no longer employed; metallic combs are used instead. The barber turns on the gas, and before he commences operations he slowly passes his metallic comb several times through the flames. His scissors and razor are likewise thus purified by fire and his customer is reassured by witnessing this burning up of all the microbes before his hair is touched with the instruments. There remains, it is true, the brush which cannot be submitted to this fiery ordeal, but there is no risk of accidental cutting into the flesh with a brush. Also the risk from the brush is mitigated by the constant use of antiseptic hairwash in which thymol, on account of its pleasant odour, is the favourite ingredient. Thus have the principles of the operating-room been extended to the barber's shop, and it must be acknowledged that this is a distinct advance. The precautions may not be absolutely effective in every detail, still, they must tend to reduce very considerably whatever risk there may be. They are certainly characteristic of the times and of the influence

that the discoveries of bacteriologists are exercising on our every-day life and habits.

## "CERTIFICATION AND CLASSIFICATION OF DIARRHŒA DEATHS."

UNDER the above title a pamphlet has been reprinted from *Public Health* and issued by the Home Counties Branch of the Incorporated Society of Medical Officers of Health. It is published by Messrs. Rebman, Limited. It contains a paper entitled "A Plea for Uniformity in Classification of Diarrhœa Deaths," by Mr. Alfred Ashby, medical officer of health of Reading, in which he draws attention to the confusion arising from the present method of certifying and classifying deaths from "diarrhœa." The society above referred to before which the paper was read in April, 1898, appointed a committee of three of its members "for the purpose of taking steps to promote uniformity in classification of diarrhœa deaths." The committee, after an exhaustive inquiry, made two reports to the Home Counties Branch in April, 1899, and May, 1900, respectively. Acting on the recommendation of the Branch, the council of the society communicated with the Royal College of Physicians of London with a view to the appointment of a committee to deal with the question. The College appointed a committee the members of which issued a very valuable report in which they recognised the specific character of the disease generally termed "diarrhœa," assigned a definite name to it, and urged the entire disuse of its numerous other synonyms. We have already referred to this report in a leading article in THE LANCET of Feb. 3rd, 1900, page 320. The report is reprinted in the pamphlet now under consideration, together with the paper and reports already alluded to. The Home Counties Branch of the Incorporated Society of Medical Officers of Health deserves the thanks of the medical profession for the energy which it has shown in this matter. The conclusions arrived at by the Royal College of Physicians of London bear the stamp of authority, and it is therefore the duty of all practitioners to take note, in order that accurate statistics may be obtained of the prevalence of the disease in special places and at special times, and that due sanitary precautions may be taken to stay the spread of an epidemic.

DR. J. ANDREW TURNER, medical officer of health of Hertfordshire and medical officer of health of the combined districts of East Hertfordshire and Essex, has been appointed executive health officer to Bombay. Dr. Turner, when medical officer of health to the combined Leicester and Rutland districts, made a first-hand investigation in Paris into the antitoxin treatment of diphtheria for his sanitary authority, and his reports, which were published in THE LANCET of Nov. 17th (p. 1173) and Nov. 24th, 1894, (p. 1235), were the first reports on the treatment published in this country.

THE first Baillie Lecture was delivered in the school of St. George's Hospital by Dr. W. Howship Dickinson on Wednesday last, Dec. 5th, and the second will be delivered on Wednesday next, Dec. 12th, at 3 P.M. Dr. Dickinson is taking as his subject, "Considerations touching the Pathology and Relations of Diabetes."

DR. G. SEATON BUCHANAN has been instructed by the Local Government Board to watch the epidemic of neuritis alleged to be due to poisoned beer, and is now engaged in visiting various places which have been principally affected.

THE Right Honourable Sir Ford North, a retired justice of the High Court, is to conduct an inquiry into the management of the National Hospital for the Paralysed and Epileptic.

# THE ROENTGEN RAY CASE AT HASTINGS.

THE recent case at Hastings, in which the Roentgen ray methods caused an injury preceding death, raises points of great practical importance to the medical profession as well as to non-medical operators with the rays and to the outside public. The following facts were deposed to before the coroner, Mr. Davenport Jones, at the adjourned inquiry held in the Hastings Town Hall on Nov. 17th. On March 21st last a widow lady, aged 68 years, met with an accident to her left hip while learning to ride the bicycle. She was taken to the local hospital where the opinion was expressed that no fracture existed. She was then removed home and was attended by Mr. Harry R. Mansell, who could not make up his mind at the moment that the hip was fractured. After watching the case for some time he thought that it would be advisable to clear up matters by applying the Roentgen rays. This was done, with the consent of the deceased, by a local photographer, Mr. J. H. Blomfield, on April 14th, when two exposures were made, according to the operator's statement, one of 35 and the other of 45 minutes, each hip being taken separately. The result was not considered altogether satisfactory by the local medical society which suggested that a further photograph to show both hips should be taken from the centre of the body. This was accordingly done with the consent of the deceased on April 27th by the same photographer with an exposure of 45 minutes. On both occasions Mr. Mansell attended and gave directions as to the position of the patient, but afterwards left the house and entrusted further details to the photographer. On the first occasion, according to the last-mentioned, the part of the body exposed was covered with clothing, but on the second it was bare. On May 4th an eruption developed on the left lower abdominal region. This was recognised by Mr. Mansell as an x ray injury and was treated with ointment, but the dermatitis developed into an ulcerated surface of the size of the hand. On July 5th the deceased declined further attendance from Mr. Mansell and called in Dr. J. H. Roberts. The latter brought Mr. A. R. Ticehurst in consultation, and attended the deceased until her death on Nov. 5th. On July 7th Dr. Roberts found her to be suffering from a sloughing wound about seven inches by three and a quarter inches. Death, in his opinion, was caused by exhaustion from the effects of shock which resulted from two injuries, the fracture of the thigh and the action of the Roentgen rays. Mr. Ticehurst, who visited the deceased in consultation and who subsequently performed a post-mortem examination, stated that when he saw the deceased alive on Oct. 5th he found her to be suffering from a dry sloughing wound of the abdomen. At the necropsy the wound had lost its slough, but there was little sign of repair. There was little fat about the body, the heart was flabby, the stomach was empty, the liver showed signs of old mischief, the vessels were degenerated, and he found an impacted intra-capsular fracture of the neck of the femur. Mr. Ticehurst would not say that the condition of the body would be sufficient to cause death apart from the wound. The niece of the deceased stated that her aunt's mind gave way several weeks before her death and she refused food, which had to be forced upon her by the nurses. The photographer, Mr. Blomfield, stated that he had had four or five years' experience with the rays, part of the time at the Hastings Hospital, and had met with no injurious effects from similar prolonged exposures. Dr. Lewis Jones, in charge of the electrical department of St. Bartholomew's Hospital, gave evidence to the effect that he had seen the apparatus used by Mr. Blomfield to take the photograph of deceased. There being no rash between the first and second exposures he would consider a medical man right in assuming that the patient was not sensitive to the rays. The risk of an x ray burn was always present in long exposures. The apparatus used by Mr. Blomfield was a year and a half out of date. In default of a better instrument the one used was a proper one. It gave a 10-inch spark and a similar one was in use at St. Bartholomew's Hospital until a year and a half ago. He himself had given exposures of 40 minutes, but the usual length of time was seven or eight minutes. Short exposures were less likely to cause burns than long. At the time when the

photograph was taken Mr. Blomfield's coil was working at five and a half inches. The coroner summed up and the jury returned a unanimous verdict: "That the deceased met her death from shock and exhaustion following the accident and the effects of the Roentgen rays upon a weakened system. No blame attached to either the medical man or the photographer."

With regard to this case it may be remarked that the fact that the friends of the deceased not having been represented by expert evidence detracts somewhat from the value of the inquiry. It was admitted that no note was made of the time of the exposure, the distance of the tube from the plate, and other details that cannot safely be left to the memory. From the evidence it is clear that a burn resulted from prolonged exposure to the focus-tube, probably from the third exposure of 45 minutes on April 27th, as the rash appeared seven days after that date. However, the fact that the first exposures were not followed by dermatitis during the 13 days that elapsed does not absolve those exposures from all blame. It is reasonable to assume that the degenerative changes in the body of the deceased were indirect factors in the causation of the burn just as they were in the fracture of the hip. Unfortunately, for reasons already stated, the full details of the exposures are not available. At the same time we are told of one important differing condition of experiment—namely, that the surface of the body was not protected by clothing on the third exposure, the one from which the damage in all probability resulted. No mention was made of the crucial point of the distance of the focus-tube from the skin. Nor was the fact made clear to the court that a 10-inch coil working at five and a half inches is reduced almost, if not quite, to the lesser value. The bearing of this upon the length of exposure is obvious. With his coil working at 10 inches Mr. Blomfield could have almost halved his exposures, and the focus-tube burn is distinctly related to the length of exposure. The reasons for a coil not working up to its full strength are various, but all are open to remedy. The mention of these facts will show the desirability of having expert evidence on both sides of so highly technical an inquiry. As regards the responsibility of a medical man who engages a non-medical man to take a Roentgen photograph the matter is not advanced by this case. The fact that the patient consents to the photography can hardly absolve the medical attendant. If the latter hands over the operation to a non-medical man it is a question how far he is relieved of responsibility. A chemist is responsible for errors in dispensing a prescription, but he is licensed to practise pharmacy, whereas the electrical or photographic worker with the rays has no such recognised and tested legal status. If the non-medical photographer had undertaken the case for the local hospital what would have been the position of the committee of that institution in the matter? On the other hand, the employment of a medical Roentgen ray expert would clearly absolve a medical man of further responsibility. Any medical operator must have hesitated to expose to the rays for 45 minutes an old lady who had been laid up for five or six weeks with a broken hip. It seems undesirable, moreover, that female patients should be submitted to the manipulation of instrument-makers and other non-medical workers with the rays. The moral of the case appears to be that apparatus should be up to date and that medical men will act wisely in sending their cases to medical Roentgen ray experts, of whom there are a fair number available.

## HOSPITAL ABUSE IN CONTINENTAL TOWNS.

AT a meeting of the Charity Organisation Society held at the Royal United Service Institution on Dec. 3rd Mr. H. NELSON HARDY, F.R.C.S. Edin., read a paper on the above subject. He stated that at one of the scientific congresses held in Paris during the Exhibition this year Dr. Thiéry, professor in the Paris School of Medicine and surgeon to one of the Paris hospitals, had read a paper on behalf of the Syndicate of Medical Men of the Seine, in which a number of facts and recommendations dealing with hospital abuse were brought forward to which it was desired to give a wider publicity. Discussing first the question as to who should be considered the sick poor, it was pointed out that in Paris the difficulty was greater than in the provinces, since between the very poor and the very rich, about neither of whom can there be any question, there is a middle class consisting of mechanics and clerks on small salaries worse off than the average clerk in England, and of employés, to whom gratuitous assistance might rightly be given in serious cases requiring treatment as in-patients. With regard to workmen suffering from trade accidents, as these are mostly provided for by insurance and in any case the expense falls not on the workman but on the employer of labour, the case ceases to be a necessitous one and should be paid for. Examples were given of hospital abuse. The cases were mentioned of a rich gentleman who drove his daughter to the Charité Hospital in his own carriage to have her treated for hip disease, of a jockey earning 20,000 francs a year applying for advice for a sprain, and of a lady who incurred the expense of travelling from America for advice and who applied at the Pitié for gratuitous treatment. The maternity cases in Paris which are attended gratuitously amount to 18,000, or one-third of the total births. 8000 of these are treated in the lying-in hospitals and 10,000 by midwives. Sunday consultations at the hospitals had been established but had not been well attended by the working-classes, the Paris working-man preferring to lose a day's work rather than a few of his hours of idleness on Sunday. Having given the results of inquiries in provincial towns in France, as well as at Brussels, Berlin, Copenhagen, Vienna, Gothenburg, and Heidelburg, the author considered proposals for reform. The part-payment system was condemned, and the proposed suppression of the out-patient department was thought too drastic. A system of inquiry into the means of applicants was suggested to be carried out by specially appointed officers under the control of one of the medical officers of the hospital.

On the invitation of the Chairman, Mr. T. HOLMES, F.R.C.S. Eng., the discussion which followed was opened by Dr. W. KNOWSLEY SIBLEY, who referred to the bribery which existed with regard to nursing in the Paris hospitals. This did not exist in England, he was glad to say, though in the out-patient department porters were known to receive "tips" for getting a patient seen by the medical officer out of his or her turn. He pointed out that in Paris patients who sought free treatment at the hospitals were obliged to attend a particular hospital in the district in which they lived. Some supervision was therefore possible and abuse could not take place to the same extent as it did in England where a person in the north of London could attend a hospital in the south and *vice versâ*. He advocated as a remedial measure for hospital abuse the formation of a central hospital board.

Dr. H. SELFE BENNETT said that the Charity Organisation Society had taken up the matter because it was sapping the morals of the community generally and also pauperising it. But little good would be done till the hospitals took more interest in the matter. He thought that it was a scandal that a hospital must be in difficulties before the public would subscribe to it.

Mr. HOWARD endorsed Dr. Bennett's views and expressed himself in favour of a central hospital board.

Mr. HOLMES, referring to some remarks from Dr. Sibley to the effect that Mr. Hardy's paper could not refer to the Paris hospitals generally, said that until Dr. Thiéry's facts had received some authoritative denial he must accept them as depicting the actual state of things which existed. He expressed the view that to put a hospital under a municipal body was sure to lead to its deterioration. Perfect efficiency was best secured by perfect freedom. Mr. Hardy's paper was principally directed to the pecuniary part of the question of abuse, but he (Mr. Holmes) believed that very few people would go through the many discomforts that were required to gain admission in a hospital if money were no object to them. A much more important question was that of efficiency. It was a matter of far more importance than whether a man who earned £2 a week got into a hospital or not. The pecuniary test was quite an illusive one. A man who earned 30*s.* per week with two children was much better off than a man who earned £2 10*s.* with 10 children. The worst feature of the out-patient department was that they undertook to do what was physically impossible. Patients were seen at the rate of about 100 seconds each. Mr. HARDY briefly replied, and a vote of thanks to the reader of the paper concluded the proceedings.

# "THE INACCURACY OF THE MEDICAL REGISTER."

A LEADING article in THE LANCET of Oct. 27th showed the Medical Register to be an inaccurate compilation, though it made no attempt to show the measure of that inaccuracy. As a result of our remarks the following report has been made to the Executive Committee of the General Medical Council:—

REPORT TO THE EXECUTIVE COMMITTEE BY THE REGISTRAR ON THE MEDICAL REGISTER.

By the direction of the President of the Council I have to report on some alleged inaccuracies in the Medical Register to which attention was drawn by an article in THE LANCET on Oct. 27th. The article dealt with two questions: (1) the appearance on the Register of the names of practitioners who were dead; and (2) the vagueness of some of the addresses. A list was given of 35 practitioners who were dead but whose names still appear. An analysis of this shows that three of these have been removed during this year, and that 14 belong to the Scotch or the Irish Branch. With these latter I have no official right to deal, and the Registrars in Scotland and Ireland respectively are fully alive to their duties in correcting the Register. Deducting these 17 names, there remain 18 respecting which some explanation is required from me. The committee will remember that steps are being taken in this office to send circular letters of inquiry, under Section 14 of the Act, to all persons on the English Register, to ensure its accuracy before the election of Direct Representatives to take place next year. A great part of this work has been done, but a section of some 7000 or 8000 names remains to be dealt with next spring. Within this section 10 of the 18 names referred to occur, and these will all be duly dealt with next year under the operation of Section 14. There remain eight names to be accounted for. Three of these are those of practitioners who died in Australia and of whose deaths it was extremely difficult to obtain any information, as there are no local registrars abroad whose duty it is under the Medical Acts to report deaths. Five names of practitioners who are stated by the writer in THE LANCET to be dead remain to be referred to. I use the word "stated" with no desire to call in question the accuracy of the information possessed by THE LANCET, but to remind the committee that your officials here cannot act except on legal evidence. We make every use we can of obituary lists, carefully looking through them and sending letters of inquiry in the case of every death that we hear of unreported by a local registrar, but we must have either a returned letter or a death certificate before erasing a name, or we must wait for six months after sending the letter. I should be glad to simplify the work of the office by at once striking off the Register the names of all practitioners whose deaths are reported by the medical press in this country or abroad, but without the direction of the Council I should be acting very wrongly in doing so. The committee will perhaps allow me to refer briefly to some of the causes which conduce to the non-erasure from the Register of the names of deceased practitioners. The proximate cause is of course that the deaths are not reported by the local registrars, whose duty it is to report them, but there are more remote causes. Why are they unreported? Not always, or mainly, I think, because the local registrars are negligent in performing their duty in this respect, for the discharge of which they, moreover, receive a fee; but because often they are not aware that the deceased person was a medical man whose death ought to be reported. When a practitioner, either on account of advanced age or some other cause, has ceased to practise, and retired, possibly into a new neighbourhood, he ceases to be known as a medical practitioner, and when his death occurs he is regarded as a private individual, and no certificate from the local registrar is therefore forwarded to this office. In other cases young men—and unfortunately the percentage of deaths among newly-registered practitioners is very high—travel into distant parts in search of health, and some dying, chiefly among strangers, are unknown to have been medical practitioners. There is yet another class of men who change their profession. I have myself known several medical men who have become clergymen, and others doubtless enter other professions in the same way, and naturally when their deaths occur they are returned to the local registrar as of that profession to which they last belonged.

Thus there must always be a certain number of deaths unreported by local registrars, and it is only by continuing the plan lately adopted in the office of systematically sending out letters to all persons on the Register under Section 14, that the names can be removed.

The second subject referred to in THE LANCET was that of the vagueness of some addresses, and the names of eight practitioners were given whose only address was "Australia." On this point I would remark that great care is taken to obtain from a person registering for the first time a sufficiently full address, and I do not know of any case in which such a vague address has been accepted, though in the unlikely event of the practitioner insisting upon its acceptance, I do not quite see how it could be refused. The vague addresses, however, come about afterwards, and I will explain how. A practitioner decides to go abroad, and just before he leaves his old home, or perhaps afterwards when travelling—for we have sometimes had letters written on board ship—he bethinks himself to tell us that the old address is no longer his, and that he is going abroad, say, to Australia. Well, on receipt of this intimation the old address manifestly cannot be retained; we have been plainly told that it is incorrect, and for the time being "Australia" is put against the name in lieu of anything better, and we await the subsequent arrival of more detailed information. In many cases this information comes when the practitioner has fixed upon his domicile, but sometimes, either because he forgets to write or does not think it worth his while, no further advice comes, and the address of Australia, used temporarily, has to become permanent.

With the committee's permission I should like to refer very briefly to another letter that was a sort of addendum to the previous article. It appeared in the issue of THE LANCET of Nov. 17th, and was from a Mr. Taaffe of Londonderry who, under the heading of "The Inaccuracy of the Medical Register," gave a list of five names of persons known by him to have died in that neighbourhood, though the names still appeared. Now investigation showed that these practitioners certainly were dead, but investigation also showed that they were all living at the time that the Medical Register left the office for press and that they died subsequently during the present year and were all duly taken off. I was advised of the death of one of them in February, of that of another in March, of a third in May, of a fourth in July, while the fifth practitioner died on Nov. 8th, just nine days before the letter of complaint appeared. It is difficult to conceive of a more groundless letter of complaint, but unfortunately it was unwittingly assumed by THE LANCET that the letter contained a just charge, and an editorial note was subjoined pointing out that the letter "added force" to the view that the Medical Register was "dangerously inaccurate," and courteously reminding the Medical Council that it would be well if it discharged its duties better.

The Medical Register may, of course, have its blemishes, but it ought to be remembered that it contains over 35,000 names of practitioners scattered over the whole world, in regard to some of whom it is extremely difficult to obtain official information, so that while, for the reasons I have pointed out, it is scarcely possible to avoid the appearance of the names of a few practitioners who are dead, the general accuracy of the Register is, considering this difficulty, well maintained, and the value of the work is, I would humbly submit, greater than is supposed by many.

Nov. 26th, 1900. HENRY E. ALLEN, Registrar.

We cannot altogether congratulate the General Medical Council or the Registrar upon this report. We showed that the Register contained the names of at least 35 dead persons (we have reason to know that the list could have been very much extended), several of whom had been dead for some years. Mr. Allen's report deals with these 35 in the following way. Three of the names, he says, have been removed this year. Possibly; but why were they not removed before? Which three are they and how long have their late owners been dead? With 17 names he says he has no official right to deal, the matter being in the hands of the Registrars of Scotland and Ireland. Possibly again, though in another part of his report he does deal with Irish names; but we presume the Executive Committee of the General Medical Council desired the whole matter to be gone into when they gave Mr. Allen his instructions. Either the Executive Committee gave the wrong instructions, or they intended Mr. Allen to furnish them with full information, or they do not desire to have a full answer published. Of the 18 names remaining Mr. Allen says that 10 are going to be dealt with next year. So we have done some good in ventilating the inaccuracy of the Medical Register. The other eight names give Mr. Allen more trouble than they need. Surely the sending of eight registered letters in accordance with the Act will settle the question whether they should remain on the Register or not.

Mr. Allen then refers generally to the causes which conduce to the inaccuracy of the official roll of the medical profession. Here he makes out a good case for the difficulty of his office. We are perfectly aware that the General Medical Council must have legal proof of a man's death before erasing his name, and have never even faintly suggested that an obituary notice in our columns should be taken as a proof of death. But the announcement of a man's death in the papers has more than a casual relation to his death. Such announcements are more often true than not—such, at least, is our journalistic experience. We think that when a man's death is announced in the press, and when, after the lapse of some reasonable time, no legal notice of the death reaches the Registrar, he might despatch a registered letter to the last address in the Register in accordance with the Act. However, the machinery of the Registrar's office is not our business. Mr. Allen says that the names of dead men remain on the Register because the local registrars of deaths do not send the necessary information to the Registrar, and he suggests that their omission is due to the fact that the deceased medical men have retired from or changed their profession. The number of medical men who change their profession is so small as not to be worth considering out of 35,000 persons, and the number who retire from practice so completely that their past calling is unknown is probably smaller.

We are glad to have obtained an explanation of how so vague an address as "Australia" comes to find a place as a registered address. We do not quite understand how it is that the addresses of "India" or "Canada" or "America" have not also been accepted as sufficient in analogous cases; but perhaps they have and have escaped unnoticed. The remedy is so obvious that we are sure that Mr. Allen and the Executive Committee of the General Medical Council have already given the necessary directions. If the practitioner does not send his address his name must be taken off the Register. Such entries as "Mr. J. Smith,

America," "Mr. T. Jones, South Africa," invite personation and are a source of danger to the public.

Mr. Allen says that Mr. Taaffe's letter was an addendum to our article. It was not. But we own that we mistook Mr. Taaffe's meaning. We are glad that the names of the dead men which Mr. Taaffe mentioned have been removed from the Register, but if Mr. Allen can produce this information why cannot he produce information concerning other dead Irishmen who still live in the official roll of their profession?

We courteously repeat that it would be well if the General Medical Council gave the profession a more accurate Register. We do this without being in the least blind to the energy of the Registrar or to the arduous nature of his task. But the Register is dangerously incorrect, and it is our duty to point this out until improvement under some systematic method of emendation has taken place. We shall watch next year's issue with interest.

## ASYLUM REPORTS.

*London County Asylum, Banstead (Annual Report for 1899).*—The average number of patients resident during the year was 2436, and comprised 1069 males and 1367 females. During the year 441 patients were admitted, 261 being males and 180 females. Of these 83—viz., 36 males and 47 females—were not first admissions. Dr. T. C. Shaw, the medical superintendent, states in his report that in many of the cases there were few symptoms of insanity present on admission; these were mostly alcoholic cases "which would have been better detained at the workhouse a short time longer and then discharged. The form of disease was not of a very excited type." Many cases of general paralysis among the admissions were of the demented type. Among the causes of insanity in the admissions drink was an etiological factor in 18 per cent. of cases, hereditary taint was acknowledged in 15 per cent., while the existence of previous attacks was shown in 23 per cent. All these numbers were probably below the truth. During the year 170 patients (94 males and 76 females) were discharged as recovered, or 6·9 per cent. of the average number resident. The deaths during the year amounted to 196—viz., 129 males and 67 females, or 8·0 per cent., as calculated on the same basis. During the year 112 post-mortem examinations were made. It is believed that improvement in the system of heating the building during the night has caused a material improvement in the hygiene of the asylum community. Among the deaths during the year 2 were due to Bright's disease, 6 to senile decay, 12 to cerebral apoplexy, 13 to cardiac and valvular disease, 18 to epilepsy and chronic cerebral disease, 21 to bronchitis and pneumonia, 24 to phthisis, 38 to general paralysis of the insane, and 51 to chronic brain wasting. In one case of death due to fracture of the sternum an inquest was held and an inquiry into the circumstances was made by the Commissioners in Lunacy, but no light could be thrown as to the manner in which this casualty was sustained. Dr. Shaw refers to the question of the separate treatment of phthisical patients and to a special report made by him to the Asylums Committee. A nurse and a male attendant died from phthisis. Five patients escaped from the asylum and four of these were brought back shortly after. With the exception of influenza there has been no outbreak of disease during the year. The Lunacy Commissioners in their report advert to the fact that no seclusion has been resorted to during the year preceding their visit and in only one case has mechanical restraint been adopted. The case-books and the medical records generally are adequately kept. "The record of service is very satisfactory. However, nine attendants were, since the last visit, dismissed for misconduct, and three of each sex were allowed to resign to escape dismissal." The wards were generally found very clean and bright. The Commissioners urge the provision of a laundry for foul linen which has long been needed and which constitutes a want that should certainly be supplied. The asylum sub-committee state in their report that the profit realised on the farm during the year amounted to £464 6s. A water-softening plant has been put down and is in operation. 24 employés of the asylum were serving with the colours in South Africa and allowances not exceeding half pay have been granted in 16 cases. Building, repairs, additions, and alterations have been made during the year at a total cost of about £8932.

*Suffolk County Asylum (Annual Report for 1899).*—The average number of patients resident during the year was 605 and comprised 266 males and 339 females. During the year the admissions amounted to 196—viz., 93 males and 103 females. Of these 10 males and 9 females were not first admissions. Dr. James R. Whitwell, the medical superintendent, points out in his report that there were 15 patients at the end of the year belonging to the county more than at the beginning, that this, as in the case of the annual increase of the previous year, was "in excess of the average usually considered to be normal to this asylum," and would probably necessitate boarding out at an early date. A considerable proportion of the admissions were found to be in a condition of serious physical ill-health "owing to the regrettable tendency to retain patients suffering from acute mental disease at home." A considerable number of the admissions were of the aged, chronic, and harmless class to whom asylum treatment could be of no service, and whose removal from workhouse to asylum meant a very considerable increase of maintenance—expense to ratepayers without any corresponding advantage. A certain number of out-patients continued to come from time to time for advice or treatment, chiefly from the union districts nearer to the asylum. Some of these have made good recoveries, while others have required re-admission. During the year 71 patients—viz., 35 males and 36 females—were discharged as recovered, or 11·7 per cent. of the average number resident. The deaths amounted to 70—viz., 36 males and 34 females—or 11·5 per cent., as calculated on the same basis. Of the deaths two were due to epilepsy, two to bronchitis, six to tuberculosis, six to senile decay, eight to general paralysis of the insane, 13 to chronic Bright's disease, and 19 to cardiac and valvular diseases. Post-mortem examination was made in every case with the exception of one. Inquests were held by the coroner in the case of one male and one female patient, who died somewhat suddenly, but from natural causes. The only serious casualty was the case of a male patient who, while out on trial, committed suicide by throwing himself in front of a train in motion. Great efforts have been made to keep as many patients as possible usefully occupied or employed both for their own good and as a source of economy. Thus 73 per cent. of male and 87 per cent. of female patients were employed in farm, garden, needlework, laundry, and otherwise. New farm-buildings are being erected to accommodate a larger number of cows, as the milk-supply has proved insufficient. The water-supply was satisfactory, but the same could not be said of the gas, which, however, will soon be superseded by the electric light. The cost of maintenance has risen somewhat during the year owing to a variety of causes, including increased price of goods, increase of the staff of nurses and attendants, the necessity of keeping vacancies in the asylum, and boarding-out of patients. The Lunacy Commissioners in their report state that all floors are now cleaned by dry rubbing, that the surroundings of the patients have been ameliorated, and that it is proposed to dispose of the sewage in future by Dibdin's system of bacterial tanks. It has been decided to increase the accommodation of the asylum by 280 beds and not to build a second asylum in another part of the county. The case-books and post-mortem records are kept carefully and intelligently.

## VITAL STATISTICS.

### HEALTH OF ENGLISH TOWNS.

IN 33 of the largest English towns 5947 births and 4017 deaths were registered during the week ending Dec. 1st. The annual rate of mortality in these towns, which had been 16·9, 17·6, and 17·6 per 1000 in the three preceding weeks, further rose to 18·0 last week. In London the death-rate was equal to 17·9 per 1000, while it averaged 18·2 in the 32 large provincial towns. The lowest death-rates in these towns were 9·1 in Croydon, 12·3 in Cardiff and in Norwich, 13·8 in West Ham, and 14·5 in Blackburn; the highest rates were 21·5 in Wolverhampton, 22·8 in Halifax, 22·9 in Liverpool, and 26·9 in Sunderland. The 4017 deaths in these towns included 356 which were referred to the principal zymotic diseases, against numbers decreasing from 485 to 351 in the five preceding weeks; of these, 89 resulted from

diphtheria, 71 from measles, 71 from whooping-cough, 55 from "fever" (principally enteric), 42 from diarrhœa, 27 from scarlet fever, and one from small-pox. No death from any of these diseases occurred last week in Norwich; in the other towns they caused the lowest death-rates in Croydon, Plymouth, Birkenhead, and Gateshead, and the highest rates in Swansea, Wolverhampton, Derby, Blackburn, and Sunderland. The greatest proportional mortality from measles occurred in Wolverhampton and Swansea; from scarlet fever in Blackburn, and Sunderland; from whooping-cough in Huddersfield, Blackburn, Sunderland, Hull, and Derby; and from diarrhœa in Wolverhampton and Blackburn. The mortality from "fever" showed no marked excess in any of the large towns. The 89 deaths from diphtheria included 29 in London, eight in Sheffield, seven in Leeds, and six in Leicester. One fatal case of small-pox was registered last week in London, but not one in any other of the 33 large towns; two small-pox patients remained under treatment in the Metropolitan Asylums hospitals on Saturday last, Dec. 1st, but no new case was admitted during the week. The number of scarlet fever patients in these hospitals and in the London Fever Hospital at the end of the week was 2727, against 2728 and 2725 in the two preceding weeks; 279 new cases were admitted during the week, against 289, 261, and 246 in the three preceding weeks. The deaths referred to diseases of the respiratory organs in London, which had been 352 and 322 in the two preceding weeks, rose again last week to 436, and were seven above the corrected average. The causes of 46, or 1·1 per cent., of the deaths in the 33 towns were not certified either by a registered medical practitioner or by a coroner. All the causes of death were duly certified in Bristol, Cardiff, Manchester, Bradford, and 10 other smaller towns. The largest proportions of uncertified deaths were registered in Birmingham, Liverpool, Sheffield, and Newcastle.

### HEALTH OF SCOTCH TOWNS.

The annual rate of mortality in the eight Scotch towns, which had been 19·2, 19·9, and 20·3 per 1000 in the three preceding weeks, further rose to 21·7 during the week ending Dec. 1st, and showed an excess of 3·7 per 1000 over the mean death-rate during the same period in the 33 large English towns. The rates in the eight Scotch towns ranged from 11·8 in Perth and 17·2 in Leith to 25·2 in Paisley and 26·6 in Greenock. The 672 deaths in these towns included 42 which were referred to whooping-cough, 19 to diarrhœa, 12 to measles, six to diphtheria, five to scarlet fever, four to "fever," and one to small-pox. In all, 89 deaths resulted from these principal zymotic diseases, against 75 and 69 in the two preceding weeks. These 89 deaths were equal to an annual rate of 2·9 per 1000, which was 1·3 above the mean death-rate last week from the same diseases in the 33 large English towns. The fatal cases of whooping-cough, which had increased from 13 to 25 in the seven preceding weeks, further rose last week to 42, of which 33 occurred in Glasgow, five in Greenock, and two in Edinburgh. The deaths from diarrhœa, which had been 16 and 20 in the two preceding weeks, declined again to 19 last week, and included six in Glasgow, six in Dundee, and four in Edinburgh. The fatal cases of measles, which had been 13 and eight in the two preceding weeks, rose again last week to 12, of which seven were registered in Aberdeen and four in Edinburgh. The deaths from diphtheria, which had been 11 and four in the two preceding weeks, increased to six last week and included two in Glasgow and two in Aberdeen. The fatal cases of scarlet fever, which had been four and five in the two preceding weeks, were again five last week, of which four occurred in Glasgow. The deaths referred to different forms of "fever," which had declined from 12 to six in the four preceding weeks, further fell to four last week, and included two in Glasgow and two in Paisley. The fatal case of small-pox was registered in Glasgow. The deaths referred to diseases of the respiratory organs in these towns, which had been 163 and 156 in the two preceding weeks, rose again last week to 160, and were 29 above the number in the corresponding period of last year. The causes of 35, or more than 5 per cent., of the deaths in these eight towns last week were not certified.

### HEALTH OF DUBLIN.

The death-rate in Dublin, which had been 26·0 and 26·1 per 1000 in the two preceding weeks, declined again to 24·5 during the week ending Dec. 1st. During the past four weeks the death-rate in the city has averaged 24·8 per 1000, the rate during the same period being 17·3 in London and 18·8 in Edinburgh. The 164 deaths belonging to Dublin registered during the week under notice were 11 less than the number in the preceding week, and included 11 which were referred to the principal zymotic diseases, against 11 and 19 in the two preceding weeks; of these, six resulted from whooping-cough, three from "fever," one from diphtheria, and one from diarrhœa. These 11 deaths were equal to an annual rate of 1·6 per 1000, the zymotic death-rate during the same period being 1·4 in London and 1·9 in Edinburgh. The deaths from whooping-cough, which had increased from one to five in the three preceding weeks, further rose last week to six. The fatal cases of "fever," which had been three and eight in the two preceding weeks, declined again to three last week. The 164 deaths in Dublin last week included 29 of infants under one year of age and 41 of persons aged upwards of 60 years; the deaths of infants showed a slight decline, while those of elderly persons exceeded the number in the preceding week. Four inquest cases and two deaths from violence were registered, and 57, or more than a third, of the deaths occurred in public institutions. The causes of 11, or nearly 7 per cent., of the deaths in the city last week were not certified.

## THE SERVICES.

### ROYAL NAVY MEDICAL SERVICE.

Staff Surgeon Herbert Parke Shuttleworth has been placed on the retired list of his rank.

Surgeon A. S. G. Bell is appointed to the *Boscawen* for the *Minotaur*.

### ROYAL ARMY MEDICAL CORPS.

Captain C. B. Lawson has arrived at Dover for duty and has been posted to the Station Hospital, Western Heights. Major H. J. M'Laughlin has assumed medical charge of troops, Station Hospital, Glencorse, vice Lieutenant-Colonel A. L. Brown, A.M.S. (r.p.). Captain A. W. N. Bowen has been ordered to proceed from Calcutta to Darjeeling to assume temporary medical charge of the Station Hospital, vice Lieutenant-Colonel J. Watson. Captain E. W. Bliss has assumed medical charge of the Small Arms Ammunition Factory and the Departmental Followers' Hospital, Dum Dum, the Foundry and Shell Factory, Cossipur, and the Powder Magazine Dispensary, Duckinsore.

### MILITIA MEDICAL STAFF CORPS.

Major Sir James Richardson Andrew Clark, Bart., late Army Medical Staff, to be Surgeon-Lieutenant-Colonel.

### VOLUNTEER CORPS.

*Artillery:* 1st Cheshire and Carnarvonshire: Surgeon-Lieutenant R. B. Wright to be Surgeon-Captain. 5th (Irish) Volunteer Battalion the King's (Liverpool Regiment): Surgeon-Major D. E. Flinn to be Surgeon-Lieutenant-Colonel. *Rifle:* 1st Volunteer Battalion the Worcestershire Regiment: Bertram Addenbrooke to be Surgeon-Lieutenant. 5th (Glasgow Highland) Volunteer Battalion the Highland Light Infantry: Lieutenant H. H. S. Scott resigns his commission; Surgeon-Captain A. Macphee to be Surgeon-Major. 1st Cinque Ports: Henry George Lynwood Allford to be Surgeon-Lieutenant.

### MENTIONED IN DESPATCHES.

In the despatches received by the Secretary of State for the Colonies from the Governor of the Gold Coast, Sir F. M. Hodgson, K.C.M.G., the names of Dr. McDowell, Principal Medical Officer to the Field Force, and Assistant Colonial Surgeons P. J. Garland, E. H. Tweedy, and A. J. Chalmers are mentioned for their help, zeal, and energy; Dr. Tichborne, West African Frontier Force; Mr. K. F. T. Buse, Gold Coast Service; Dr. Langstaff, Gold Coast Service; Surgeon-Lieutenant Fletcher, Militia Medical Staff Corps, wounded; Dr. MacFarlane, Lagos Hausas, wounded; and Dr. De Groot, Gold Coast Service, are also referred to and Colonial Surgeon Hay is mentioned as one of the officers selected to guard the Fort at Kumassi. "The mental anxiety which these officers [those in charge of the Fort] had to endure," says the despatch, "must have been very severe, and as each

day passed and brought them and the gallant soldiers under their command nearer to the end the strain upon them must have become almost unbearable. For three weeks they truly and unflinchingly upheld the honour of the British flag under circumstances which might have appalled the stoutest heart."

### TRANSVAAL WAR NOTES.

In a despatch from Lord Kitchener dated Bloemfontein, Dec. 1st, and dealing with General Paget's engagement, among the list of killed and wounded are the names of Lieutenant Challis, Royal Army Medical Corps, who was severely wounded, being hit in three places while gallantly attending wounded men under a heavy fire, and Surgeon-Captain Godfray, New Zealand Mounted Rifles.

Major T. Archer, R.A.M.C., Lieutenant F. S. Walker, R.A.M.C., and Civil Surgeon D. V. M. Adams have arrived in England, invalided, in the P. and O. transport *Assaye*. Lieutenant W. Jagger, R.A.M.C., and Civil Surgeons W. L. Wainwright, L. V. Cargill, and W. C. Allan also arrived in the same vessel, having been in medical charge of the ship.

The Princess of Wales has forwarded from Sandringham 15 brace of pheasants for the patients at the Gables Military Convalescent Hospital, Surbiton, which Mr. Alfred Cooper founded and is maintaining during the war.

Lieutenant-Colonel H. L. Battersby, R.A.M.C., and Civil Surgeons J. A. Barnes, L. Cooper, and J. E. Ker are in medical charge of the *Orotava* which left for England on Nov. 28th.

Civil Surgeon A. E. Elliott died at Middelburg on Dec. 1st and Civil Surgeon C. C. Parsons at Harrismith on Dec. 2nd, both from enteric fever.

### VOLUNTEER OFFICERS' DECORATION.

This decoration has been conferred upon Surgeon-Major F. W. Gibbon of the 1st Durham Royal Engineers (Volunteers).

### VOLUNTEER MEDICAL STAFF CORPS.

The annual supper and smoking concert of No. 1 Company, composed of students from University College Hospital, King's College Hospital, the Middlesex Hospital, and Charing-cross Hospital, took place at the Headquarters, Calthorpe-street, on Nov. 30th. About 70 were present, Surgeon-Captain Whait, commanding No. 1 Company, being in the chair. Among the toasts were "The Queen," "The Guests," and "Those of Our Corps Serving in South Africa." Speeches were made by the commanding officer, the major, and the adjutant. The concert was a great success and an altogether enjoyable evening was spent. The guests included Surgeon-Lieutenant-Colonel Squires, V.D., Major Matthews, Captain Wray, R.A.M.C., Surgeon-Captain Macgregor (19th Middlesex), and other officers of the Volunteer Medical Staff Corps, together with Sergeants Tytheridge and Turtle, of the Imperial Yeomanry Hospital, and two members of the City Imperial Volunteers.

### LORD ROBERTS'S FAREWELL ORDER.

There has probably never before been such a farewell order addressed by a general to his army as that which Lord Roberts has addressed to the forces lately acting under his command in South Africa. If the campaign in that country has been in many respects unique in the history of modern warfare so has the order which it has occasioned. It has throughout a true ring and expresses the real mind of a distinguished commander who is unaffectedly proud of his army and profoundly appreciative of the labours which it has undergone, of the courage and cheerfulness by which it has been sustained, and of the qualities of humanity and forbearance which the troops have exhibited throughout one of the most arduous and trying campaigns on record. As we have more than once said the British soldier in South Africa has had to fight physical geography as well as a stubborn, well-armed, and often invisible foe employing a new system of tactics. The military operations have been continuous and incessant, and the marches have probably been unprecedented in number, length, and difficulty—indeed, there is hardly any phase of warfare which our troops have not experienced. Lord Roberts, it must be remembered, has been a warrior from his youth up and consequently knows what war is. It is, therefore, quite refreshing to read the estimate which he has formed of the work which he has seen going on under his eyes as compared with the fault-finding, captious criticisms or light-hearted levity with which such matters have been too often regarded by amateur dabblers in war. We may depend upon it that foreign nations and foreign armies, whatever may have been said to the contrary, in their hearts are very much of the same opinion about the qualities of British troops as that expressed by Lord Roberts in his farewell order to the army in South Africa.

### THE COLONIAL TROOPS ENTERTAINMENT.

On behalf of the committee appointed to make arrangements for the public reception and entertainment of the representative colonial contingent of forces serving in the War in South Africa, which is expected to arrive in England early next year (as well as the Canadian contingent now here), the Duke of Abercorn appeals for liberal assistance in a letter to the press. A very heavy expense must be incurred to give these troops a welcome in some degree worthy of the national appreciation of their splendid services. The officers and men of these contingents, numbering over 5000, will be brought to, and maintained in, this country and will be afterwards conveyed to their homes at considerable expense, the necessary funds being provided by Parliament, but such funds will not be chargeable with the cost of functions and entertainments not of a strictly military character, nor with the conveyance of the men to provincial cities or other places of interest. Over 5000 men have to be entertained and while it is hoped that large subscriptions will be tendered by those who can well afford it smaller contributions of any amount will be gladly received. Remittances may be made to the credit of the "Colonial Troops Entertainment Fund" at Messrs. Parr's Bank, Limited, 77, Lombard-street, E.C., or to the secretary or the treasurer, at 71 and 72, King William-street, E.C.

### ARMY MEDICAL SCHOOL, NETLEY.

Under orders from the War Office a special examination was held in the Army Military School on Nov. 25th and 26th for the surgeons-on-probation of the Royal Army Medical Corps who were admitted to the school on Oct. 1st by examination and nomination by the Secretary of State for War on the recommendation of the medical schools of the United Kingdom. As a result of the examination the following gentlemen were recommended for commissions as Lieutenants in the Royal Army Medical Corps:—

SURGEONS-ON-PROBATION BY EXAMINATION.

| | |
|---|---|
| H. J. McGrigor. | C. D. Myles. |
| W. R. S. Goodwin. | R. N. Hunt. |
| J. H. Brunskill. | H. E. Howley. |
| A. C. Duffey. | R. F. M. Fawcett. |
| A. W. Gibson. | |

SURGEONS-ON-PROBATION BY NOMINATION.

| | |
|---|---|
| W. L. Steele. | J. C. Kennedy. |
| H. A. Davidson. | A. R. C. Parsons. |
| T. Finucane. | J. B. Cautley. |
| J. W. West. | W. M. B. Sparkes. |
| W. Riach. | S. B. Smith. |
| H. R. Bateman. | R. W. Powell. |
| H. G. Pinches. | J. L. Jones. |
| T. F. White. | |

### MEDICAL OFFICERS IN ACTION.

Medical officers, whether belonging to the regulars, colonials, or volunteers, have not spared themselves in the present war. They have not been behindhand in gallantry or in risking their lives and limbs on the battle-field. In the report of the late operations of General Paget's force north-east of Bronkhurst Spruit, where there was severe fighting, we read that Lieutenant Oswald Challis, R.A.M.C., was severely wounded, being hit in three places while gallantly attending wounded men under a heavy fire. We sincerely trust that this brave young officer may make favourable progress and soon recover. Surgeon-Captain Godfray of the New Zealand Mounted Rifles was also wounded in the same action. We are proud to say that there has always been the same spirit among medical officers throughout this war.

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**DEATH FROM INHALATION OF CHLORINE.**—An inquest was held at Trowbridge, Wiltshire, on Nov. 30th, relative to the death of Miss Le Lean, aged 30 years, a lecturer under the Wilts County Council. Evidence showed that the deceased on Nov. 27th was attending a class of practical chemistry at the Bradford-on-Avon Technical Schools. During the temporary absence of the other students she took up one of the jars containing chlorine gas and, thinking it was empty, inhaled the fumes. She was taken violently ill and, in spite of medical attendance, she died two days afterwards. The jury returned a verdict that death was due to syncope arising from chlorine gas inhaled by misadventure.

# Correspondence.

"Audi alteram partem."

## POISON IN BEER.

*To the Editors of* THE LANCET.

SIRS,—Will you permit me to reply through your columns to the numerous requests which have reached me from all quarters for some indication of the views of myself and friends interested in the Pure Beer Movement upon the lamentable epidemic of poisoning in Manchester and other towns. Without anticipating the result of the scientific investigations now in progress there would appear to be little doubt that the epidemic is a striking illustration of the public danger to which we have for many years directed attention, arising out of the liberty permitted to brewers to use any materials they choose in the brewing of beer. This liberty is enjoyed under what is popularly known as the "free mash tun"—a concession granted by Mr. Gladstone when he repealed the malt tax in 1880. So largely did the brewers avail themselves of this freedom in the choice of ingredients that within a few years a movement was inaugurated with the object of securing a definition of "beer," and for many years subsequent to 1885 a Bill was annually introduced in Parliament for the purpose of obtaining such definition. In 1896 the Bill, which, with the assistance of members on both sides of the House, had been amended and amplified, reached the second reading stage; but on the Chancellor of the Exchequer offering a Departmental Committee to inquire into the matter the Bill was withdrawn. The sittings of this committee extended over two years, the outcome being a majority report against any alteration of the existing law, and a minority report strongly insisting upon the necessity of safeguarding the interests of the public.

We are of opinion that recent events are a complete justification of the minority report, and that had the Government acted upon its recommendations the present epidemic might never have occurred. It was pointed out that the fact of brewers being free to make beer of any materials they pleased so long as the revenue did not suffer rendered necessary much more scrupulous regulations for the protection of the public against the use of deleterious ingredients than at present exist.

Although there is no article of food consumed on anything like the scale of beer in the manufacture of which the indiscriminate use of any chemical or other material is permitted by law, the system of examination followed by the Excise officers in the breweries and by the Inland Revenue officials at Somerset House is designed for the protection of the revenue and not the detection of deleterious ingredients, so that the presence of any dangerous impurity is never likely, under existing circumstances, to be discovered until after the mischief has been done.

Notwithstanding that the Treasury may be "empowered" to prohibit the use of anything noxious or detrimental, the evidence taken by the committee went to show that this power has never been exercised save in the case of saccharin, a preparation believed to be harmless, but which was regarded as "detrimental" to the revenue. Further, the fact remains that the present epidemic has occurred in spite of official precautions, whatever they may be. And so long as the present system is allowed to continue so long will the door remain open to the use of poisonous or deleterious ingredients. It was also demonstrated to the committee by public analysts of high standing that they were powerless in the matter, as the Provisions of the Food and Drugs Act were inoperative as regards beer. Surely the time has now come when a period should be put to this subordination of public health to the interests of the revenue.

Sir Henry Primrose, the chairman of the Board of Inland Revenue, was congratulating the Country Brewers' Society the other day on the excellent relations which subsisted between his department and the great brewing interest, and he thought the attacks on the "free mash tun" might be regarded as at an end. As he is further reported to have said that he entered upon the "Beer Materials" Inquiry with the "blank impartiality which is born of blank ignorance," one is tempted to imagine, having regard to the strange way in which the conclusions of himself and the majority of the committee have been falsified by recent events, that he must have emerged from the investigation in much the same state of "ignorance," minus the "impartiality." I only refer to these utterances of Sir Henry Primrose because they are typical of the attitude which has been habitually adopted by the department over which he presides on this important question.

Every brewer knows perfectly well that the employment of invert sugar, glucose, &c., in the preparation of which dangerous chemicals are used is not necessary to the successful manufacture of beer. They enable beer to be matured more quickly and therefore larger quantities can be turned out with the same capital, plant, and storage room, and there is this further advantage, that by keeping down the demand for barley its price is correspondingly depressed and brewers are able to purchase such quantities as they are *obliged* to use at a cheaper rate. It is in the light of these facts that Mr. Read in his report asks that the complaints about British barley and the statement as to the *necessity* of getting "sun into the mash tun" should be regarded. Abroad the use of substitutes has in some States been for centuries absolutely forbidden; in Bavaria, it is a criminal offence, and not only the public, but the brewers themselves, are most active in seeing that the law is strictly enforced. It is difficult to see why that which is found not only desirable, but practicable, there should be regarded as impossible here. At any rate, the wholesale poisoning which has unfortunately occurred only goes to prove the necessity for still greater exertions in prosecuting the movement for better securing the purity of beer, and certainly justifies the opinion of Mr. Read, based upon a careful consideration of all the evidence placed before the Beer Materials Committee, that legislation or other provision is necessary to prevent the use of deleterious substances in brewing.

We propose to bring the matter again before Parliament at the first opportunity, feeling as we do that the time has surely come when the same protection as is afforded to the purchaser of other articles of diet, such as butter, milk, coffee, &c., should be extended to the immense number of our fellow-countrymen whose regular and favourite beverage is beer.

I am, Sirs, yours faithfully,

House of Commons, Dec. 4th, 1900. CUTHBERT QUILTER.

*To the Editors of* THE LANCET.

SIRS,—It will be found that cases of arsenical poisoning are not confined to the Manchester district but are very widespread. The medical profession in Ilkley-in-Wharfedale have been greatly exercised during the last four months at the unusual number of severe cases of peripheral neuritis and acute skin affections that have come under their notice, for the most part occurring in beer-drinkers. The beer has been suspected for some months past as being the cause. But as no chemicals or preservatives were used in the local brewery that largely supplies the district the situation was perplexing. At one time I thought formalin might be the cause as in some breweries it is used to cleanse vats, bottles, casks, and also as a preservative in cheap beers. The brewery authorities were keenly active in endeavouring to fathom the mystery and ordered an analysis a month since, but unfortunately the analyst only looked for what ought to be in beer. Arsenic has now been found in the "invert" sugar used in the brewing and also in the beer. There are also an unusual number of cases of peripheral neuritis under treatment, of influenzal and rheumatic origin, occurring in non-beer-drinkers. Some of these are possibly of mixed origin. Aerated waters are not above suspicion where sulphuric acid is used to produce the gas.

I am, Sirs, yours faithfully,

Ilkley-in-Wharfedale, Nov. 30th, 1900. A. H. BAMPTON.

## "TREATMENT OF BRITISH PRISONERS OF WAR AT PRETORIA."

*To the Editors of* THE LANCET.

SIRS,—As a reply to your remarks in your issue of Sept. 22nd, 1900, it seems to me that I cannot do better than enclose a copy of a letter I have sent to the Field Marshal Lord Roberts—an answer to which I have not yet received. I saw the report for the first time quite accidentally and my astonishment can be imagined when it is known I had no idea there was anything of the sort. I do not think the method of a court of inquiry is understood. There was no clerk to make a record of the proceedings, the evidence was not on oath, there was no confrontation of witnesses or cross-examination. I was ignorant that

there was any allegation against me, did not know of the witnesses or who they were, had no opportunity of cross-examining or in any way meeting the evidence which was not disclosed to me. I have had, therefore, no opportunity of defending myself. It is remarkable that the very obvious desire of some of the witnesses to exculpate themselves or gain *kudos* at my expense did not create some suspicion in the mind of the court.

I am, Sirs, yours faithfully,

H. PRIOR VEALE.

Hout Bay, Cape Division, Cape Colony, Nov. 12th, 1900.

Hout Bay, Cape Division, November, 1900.

To the Field Marshal Lord Roberts of Kandahar and Waterford, K.P., G.C.B., G.C.S.I., G.C.I.E., V.C., Commander-in-Chief of the British Forces in South Africa.

MY LORD,—I am persuaded that your lordship would regret any act of injustice which upon mistaken information you might possibly commit, and I approach you with a confident hope that you will cause further and more complete inquiry to be made and will not hesitate if and when satisfied that you have drawn in error a conclusion most injurious to myself to remove from my good name the shadow of your heavy adverse reflection. In a letter from your lordship to the Secretary of State for War, covering the report of the proceedings of a Court of Enquiry held with regard to the treatment of British prisoners of war in Pretoria, the following passage occurs:—"On the other hand it would be difficult to condemn too strongly the conduct of Dr. H. P. Veale, M.B. (Cambridge), whose heartlessness in ignoring the disgraceful treatment of the sick prisoners and the remonstrances addressed to him by the medical officers in immediate charge of them calls for the severest reprobation."

From the passage above quoted, read with the letter from Colonel Hunt, I must infer that your lordship supposes me to have occupied some official or recognised position in which I could have remedied the condition of affairs regarding prisoners of war. The statement to this effect made by Colonel Hunt in his report naturally and probably weighed greatly with you. I beg, therefore, plainly to point out to your lordship that though a member I never was head of the Red Cross Society nor at any time occupied any official position giving me any authority or control with regard to the prisoners of war. Such services as I rendered in connexion with the prisoners of war at the Racecourse and elsewhere were rendered gratuitously on humane consideration only. I may mention incidentally that the Transvaal Red Cross Society depending on public voluntary subscription none of its members or servants to my knowledge received any remuneration. The administration of matters affecting prisoners of war was placed by the State as a distinct department under a specially appointed committee to which the charge of the sick and wounded was allotted. This appears from the separate resolution of the Executive Council appointing the "Medical Commission" and conferring on it jurisdiction over all medical matters and men in the State *except the prisoners of war*. I was associated with the Medical Commission, but was at no time engaged in the distinct department mentioned or by the Prisoners' Committee, and it may be questioned whether, according to the Executive Council resolution, I could have been so engaged. Be that as it may, I had no function or appointment in that connexion. But it may be felt that though I had no official position to redress evils of administration, yet as a graduate of a great British University something more might be expected of me than of other medical practitioners. On this head I beg to point out that I used such opportunities as I had not merely for ameliorating the condition of things of Waterval, but with a view to preventing that spot being used as it was. I would point out that I dreaded what might happen there and most cheerfully seized the opportunity given me of inspecting Waterval on the 27th December, 1899.

On the 28th December, 1899, I sent a report totally condemning Waterval as a site for a camp. I had the water analysed and I forwarded to the Prisoners' Committee the report condemning it as unfit for use. In order that they should not be overlooked or forgotten I repeated these reports on the 12th January, 1900, to emphasise the danger the Prisoners' Committee was running. Copies of these letters were given by me to the Court of Enquiry. To prevent mischief to health at Waterval I on the same date further pressed by letter upon the Prisoners' Committee that the sick should be immediately removed to the Racecourse, feeling certain that this step would reduce the risks entailed by the distance of Waterval from Pretoria (copies given to the Court of Enquiry). In addition to these written efforts, and quite beyond any official function entrusted to me, I urged verbally on officials highly placed under the Government and on members of the Prisoners' Committee the above or other means for preventing or ameliorating the unsatisfactory state of affairs. I was more than once told that the Prisoners' Committee did bring the matter before the Executive Council who, however, refused to alter matters. On the 16th January, 1900, I urged (copy handed to Court of Enquiry) the Prisoners' Committee to appoint Dr. Haylett as resident "responsible" medical officer of the committee at Waterval, in the hope that if the committee went so far it would also enable the officer to do his work under proper conditions. His first appointment to Waterval, dated 27th December, 1899, did not speak of responsibility and my suggestion was to make Dr. Haylett, the officer at Waterval, responsible for the sick and wounded to the committee who should support him. Dr. Haylett, in full knowledge of the condition of affairs, accepted the 16th January, 1900, appointment, but I cannot say to what extent also he used his position to influence the members of the Prisoners' Committee and to press on steps desirable. He may have done so ineffectually. What I wish to emphasise is that he was in a position independent of myself. When holding the temporary position of commissariat officer to the "Medical Commission" I again tried to help the prisoners and wrote to the Prisoners' Committee (24th Feb., 1900, copy given to Court of Enquiry) urging it to arrange for placing the sick and wounded prisoners under the "Medical Commission," so that burghers and prisoners could be treated alike, and the reply I got was that the Prisoners' Committee was satisfied with things as they were. I also urged through the State Attorney, who was a member of the "Medical Commission," that those prisoners who came under the release clause of the Geneva Convention should be released. I worked this until Dr. Bierens de Haan and myself were appointed a board to report on the physical condition of certain prisoners. We reported that three officers and some men came under the clause. Their release was ordered and the time of their departure fixed, but at the last moment an order came from the Government countermanding the order of release because the Commissioner of Police did not think the Convention applied. I urged the State Attorney to advise the State Secretary on the matter, which I believe he did. The men, however, were not released, though the officers were subsequently in some ill-defined way.

That I did urge, and was anxious to give, assistance to the prisoners, the best assistance in my power, is clearly shown from what took place with regard to the officers. When an officer became ill in his quarters I was only able to give medicines, suitable diet, alteration of his sleeping quarters, and other things equally necessary I was not allowed to interfere with; but when I could get the necessary permission and remove the sick to the Bourke Hospital (of which I was in charge for the Red Cross Society) there was nothing procurable and suitable that such sick did not receive. This shows that when I was able to act free from the Prisoners' Committee I was successful in securing proper treatment of the sick. I would here remark incidentally that the Government or its subordinates gave no help whatever to the sick and wounded officers in Pretoria and that everything they received was obtained by me in the first instance from the Red Cross Society and later from private sources.

I venture to hope that if your lordship will kindly give attention to the above true representations as to my position and what I did, you will conclude that not having been appointed by the Government to look after the prisoners not only was I not officially responsible for what was left undone, but further as an ordinary medical practitioner I did not ignore any lack of proper treatment brought to my notice, but did what I could to improve the circumstances and alleviate the sufferings of men as well as officers. Upon representations which have been erroneously made your lordship, it appears, has judged me adversely as having ignored remonstrances addressed to me by other medical officers. This can only apply to one medical officer—viz., Dr. Haylett. This gentleman's appointment was specially urged by me because I thought that with his knowledge of the Dutch language and acquaintance with the officials he might perhaps achieve much improvement at Waterval, when, prior to his appointment of the 16th January, 1900, which made him responsible, he wrote to me on the condition of affairs at Waterval on the 27th December, 1899, this matter was being dealt with by the appointment of the inspecting commission previously mentioned in this letter. I had his letter translated into the official language and forwarded it the same day with a covering letter to the Prisoners' Committee (copies handed to Court of Enquiry). Then Dr. Haylett wrote again re-stating the condition of affairs and also stating that he had interviewed the Prisoners' Committee. I told him that I was not the proper person to write to and advised him to continue to address the Prisoners' Committee and the Executive Council, but said that if he would write his letters in Dutch (the official language) I would forward and support them. He had, in fact, caused me unnecessary trouble in getting his previous letter forwarded as I had to get someone to translate it—not being able to do so myself and I had no secretary, as has been stated. The other notes I received from him being requests for medicines were at once handed to local chemists for execution and he received these consignments without delay. I had, indeed, also informed him that it was, strictly speaking, the duty of the Prisoners' Committee to supply him with medicines, but I was willing to see to these supplies and did so, as he held, not without reason, that it was vain to expect the requisite prompt attention from the Prisoners' Committee. It is not easy to understand how Dr. Haylett could seemingly have believed that I was the chief medical officer, and it is noteworthy that when he approached the Prisoners' Committee on the 7th January, 1900, he does not appear to have made complaint as to his unanswered letters. In this connexion I may refer incidentally to his letter dated the 7th January, 1900, which was handed to the Court of Enquiry. His action throughout scarcely supports his assumed attitude as my subordinate. Dr. Haylett did not, as must be inferred from the statement recorded, tender his resignation by way of protest against his unsatisfactory position, but it will be found that he resigned rather because the Pietersburg Railway Company would otherwise be unable to continue his appointment as their medical officer. In fairness to myself I must call your lordship's attention to the fact that it was not possible for me at the Court of Enquiry to meet allegations against me which were not disclosed or known to me, and when at a later date the apprehension that I was regarded unfavourably caused me to write to your lordship the interview which I had with Colonel Cowan removed it. At this distance in Cape Town I am somewhat handicapped in presenting my exoneration, as, of course, I have not with me all the materials which would be available at Pretoria.

There is a special point of fact in Colonel Hunt's report which may, perhaps, have contributed to place blame which cannot justly attach to me. I refer to his remarks with regard to the sick in the gaol and their non-removal. No other medical man being mentioned by name it may be supposed that I am referred to, whereas the gaol was and is under the district surgeon. Colonel Hunt in the same letter attributes to me unworthy motives for action or inaction for which he believes me responsible or culpable and yet cannot have formed his conclusions from any personal observations nor can he have been aware of the fact that my position and practice were entirely independent of remuneration or reward from the Government of the State. It may be that your lordship will, amidst much more important work, find time and occasion to investigate my appeal and ascertain the facts which I have here loosely strung together, and I most earnestly trust that such reconsideration of my case may remove the stigma under which your censure leaves me before the world.

## "THE QUESTION OF THE COMMUNION CUP."

*To the Editors of* THE LANCET.

SIRS,—Theologians and students of ritual will, I think, welcome the discussion in THE LANCET of the question of possible infection conveyed by the touch of the communion cup. Obviously there are two separate questions—one of medical fact, the other of ritual observance. The question

whether infection may possibly or probably be conveyed by any given mode of administering holy communion is one for medical experts only; it is foolish for anyone else to give an opinion. It has, indeed, been suggested that communicants, obeying a Divine command, may commit themselves to the Divine protection against possible harm. I cannot put that suggestion summarily aside, because I believe in what is commonly called "miracle" as possible and not unfrequent; but I should meet it by a reminder of the theological commonplace that miracle must not be unnecessarily presumed either as an explanation of fact or as a guide to action; such presumption, therefore, is no excuse for doing a dangerous thing which is avoidable. It is technically presumptuous to hope for miraculous protection without taking all natural precautions. It is for medical experts alone to say whether any given precaution be adequate.

Is the peril, then, avoidable? If our actual practice be dangerous it is for ritual authorities to consider what may be substituted. There seems to be a tendency in some quarters to assume that no change can be made. I cannot understand this. Theologically speaking, it is to me inconceivable that God, Who reveals to scientific research the hidden perils of nature, has tied the administration of His Sacrament to a mode which that revelation shows to be harmful. Practically speaking, there are several modes of administration known in the Church. Careful consideration of the question will certainly be demanded. The *Church Times* was lately urging the English bishops to appoint a commission of inquiry. Even at the present stage of discussion it may be useful to recall the methods used.

In the greater part of the Eastern Church the method of *intinction* prevails, to which you have already referred. A kind of sop is made in the chalice, which is administered by a spoon. I believe the spoon is rinsed after each using, with what effect the proper experts may say. This method is not perhaps very likely to find favour with us.

In the West, before the withdrawal of the cup from the laity in the twelfth and following centuries, the sacred species was often administered by suction through a *fistula* or metal tube. This would probably be even more open to objection than our practice, in which the lower lip only comes into bare contact with the outside of the cup.

Early in the eighth century the Pope, St. Gregory II., forbad the use of many chalices on the altar for symbolical reasons, requiring all to communicate from one cup. This brought in the use of very large vessels, from which the sacred species was poured into smaller cups, called *scyphi*, for the communion of the people. This may show that no theological or ritual exception can be taken to the use of a separate cup for each person, advocated by your American correspondent, but there is an overwhelming practical objection where any large number is concerned. The rule of the English Church requires the total consumption of the consecrated species by the priest, alone or with the help of some communicants. This cannot be effected save by the usual practice of pouring into the cup some wine or water, or both, and drinking this. The treatment of several hundred cups passes imagination.

There is a practice, not formally adopted, so far as I know, anywhere in the Church, but sometimes followed by individual priests in difficult cases of clinical communion, which may be worth mentioning. A particle of the species of bread is slightly tinged in the chalice and then laid on the tongue of the communicant. This method of giving communion presents little practical difficulty and might conceivably be adopted by authority for general use.

Some of your readers may be glad to have this material to work upon in their character of medical experts.

I am, Sirs, yours faithfully,

Madingley Vicarage, Cambridge, Nov. 28th. T. A. LACEY.

## BERI-BERI AND CHRONIC ARSENICAL POISONING.

*To the Editors of* THE LANCET.

SIRS,—I trust that you will allow me to call attention in your columns to a point of some interest in connexion with tropical medicine raised by the present epidemic of peripheral neuritis in Chester and Manchester. The extraordinary similarity of some of the cases to certain phases of beri-beri seems to me to suggest the question whether many instances attributed to the latter disease may not really be due to chronic arsenical poisoning. Owing to the kindness of several medical gentlemen I had the opportunity of examining pretty carefully 10 of the Chester cases, and also of seeing several of those which had occurred at Manchester. I certainly thought that Dr. W. A. Newall and Dr. J. R. Prytherch of Chester were abundantly justified in noting an extreme resemblance between their cases and cases of beri-beri. The local anæsthesias, especially of the feet, of the tibial skin, and of the finger-tips, the dropsy over the tibiæ, the tenderness of the calf muscles, the loss of the deep reflexes, the ataxia combined with paresis, even the peculiar spacing of the heart-sounds in some instances, were all so suggestive that had the cases occurred in a beri-beri region I believe few medical men would not have returned them under that heading.

Assuming the cases to be due to chronic arsenical poisoning, we may well ask whether similar epidemics occurring in the East or on board ships may not often have been wrongly attributed to beri-beri. The possibilities of arsenical poisoning on vessels are too obvious to need reference in detail. Natives of India and Burma are very fond of lemonade which is manufactured from European chemicals—probably of the cheapest sort. They also often delight in tinned and bottled fruits. The occupants of jails, hospitals, and asylums may suffer from arsenical poisoning through half a dozen routes. The sudden disappearance of beri-beri from the Japanese navy after a general change of diet is certainly suggestive. It has long been thought on epidemiological grounds that beri-beri may be due to some form of food-poisoning; it now seems just possible that the poison may be, at least in some cases, nothing but arsenic. The sudden improvement occurring in most cases after removal from the house where they contracted the malady is certainly more suggestive of intoxication than of infection. In short, regarding such epidemics of beri-beri as I have had the opportunity of witnessing, I should be sorry to be called upon to give a definite statement to the effect that they were not due to chronic arsenical poisoning.

Of course there may be, and very probably so, a true beri-beri, but the points of distinction do not seem to be very clearly established at present. I think I remember bullæ and even pigmentation in India. Certainly cases approximating to the "wet" form of beri-beri do not seem to have been noted in Chester; but this is, I think, a later stage of the disease, and may perhaps have been overlooked in chronic arsenical poisoning. Lastly, our knowledge of the epidemiology of beri-beri cannot be said to be so complete as to enable us to exclude all possibility of arsenic being concerned in the causation at least of many cases attributed to the disease.

In conclusion, I hope that it will be understood that I am only suggesting a possibility and that I do not presume to erect a theory. The next ship which arrives infected with beri-beri at an English port will afford an opportunity for an examination of the question.

I am, Sirs, yours faithfully,

Liverpool, Nov. 30th, 1900. RONALD ROSS, D.P.H.

## "THE TREATMENT OF SPRAINS AND OF SOME FRACTURES."

*To the Editors of* THE LANCET.

SIRS,—For the last 20 years I have been treating sprains by the application of adhesive plaster and, like Mr. Christopher Heath, I have found this plan far more satisfactory than the older methods. Since I first became aware of its value I have never omitted to use this plaster in some stage or other of the treatment of these injuries, even in sprains accompanying fractures. I was first led to realise the advantages likely to result from so firm and steady a support as that effected by adhesive plaster when studying œdematous tissues microscopically for the purpose of the "Atlas of Histology." The plasma which in œdema is infiltrated into the connective tissue, separating almost every individual bundle from the others, seemed likely not only to prevent repair by its pressure, but also (from lack of complete absorption) to produce permanent thickening of the tissues by becoming organised.[1] This condition pointed to the desirability of preventing, if possible, this infiltration from taking place, and if it had already taken place of promoting its absorption, and the firm support without undue

[1] Atlas of Histology, Plate VIII., Fig. 14.

pressure given by adhesive plaster seemed just what was required.

In using adhesive plaster for this purpose certain precautions are necessary. No attempt must be made to produce pressure; the plaster must be laid on very evenly, being held only just sufficiently firmly to allow it to adhere without creases. It is necessary to use a plaster which does not require heating, and there are several so-called rubber plasters now made which are suitable. Strips from one to two inches wide are best, and they should just overlap each other. After a few days, or sooner, the plaster should be removed and fresh strips applied. If the deep tissues are not very severely injured it is well to precede the application by about five minutes or more of gentle massage (towards the heart). Massage is also very useful in the subsequent treatment whenever the plaster is removed. In addition to massage passive movement is generally beneficial. I have applied strapping in a case in which I feared gangrene of the tissues round an ankle, the joint not only having been sprained but the soft parts also severely crushed. The patient made a good recovery. I have also applied strapping in the case of a Pott's fracture which necessarily involved a severe sprain. The effect was to prevent swelling and thus greatly to hasten the cure; and as there was consequently very little infiltration of plasma subsequent stiffness of the ankle was prevented. If a sprained joint is already swollen when seen by the surgeon it is well to raise the affected part above the level of the body for a few minutes to allow gravitation of the blood and during this process the massage may be carried out and will help in reducing the œdema.

Although it is best to use the plaster from the first, yet the beneficial effect of this treatment of sprains is very noticeable when applied to patients who have undergone some days of treatment by the old plan—i.e., rest of the affected limb and the application of evaporating lotions. The swollen joint will be rapidly reduced in size by absorption of the infiltrating fluid after application of the plaster. In these circumstances we should remove and re-apply the plaster as soon as the œdema has visibly lessened, and this may be necessary every day, until very soon the joint will have assumed its natural size, in perhaps as many days as it would otherwise have taken weeks. The advantages of the adhesive plaster treatment are immense. Often the patient may begin to walk about directly the plaster is applied, and there can be no doubt that early use of the part as well as passive movement and massage assist the cure.

*Dislocations.*—The difference between a sprain and a dislocation is chiefly a matter of degree as regards the injury to parts surrounding a joint, and therefore the same considerations in respect to treatment should prevail. Without entering into details with which many of your readers must already be familiar I would sum up the treatment of dislocations as follows: 1. Reduction under an anæsthetic, in order to avoid unnecessary and detrimental disturbance of the injured tissues. 2. Support by means of adhesive plaster and light bandaging. 3. Early *passive* movement, commencing 24 hours after reduction and repeated daily. 4. Massage. 5. Early *active* movement.

Undoubtedly, there may exist complications which will necessitate a modification of this line of treatment, but in the majority of cases the above rules may be followed with advantage; the period of treatment will then be considerably shortened from that pertaining to the older methods, and stiff joints will almost certainly be avoided or much reduced in degree.

I am, Sirs, yours faithfully,

Queen Anne street, W., Nov. 24th, 1900. NOBLE SMITH.

## OLIVE OIL IN TYPHOID FEVER.

*To the Editors of* THE LANCET.

SIRS,—In view of the enormous mortality from enteric fever amongst the British troops in South Africa may I again bring before your readers a method of treatment advocated by myself in your paper about two years ago?[1] It consists in slowly administering every 12 or 24 hours an injection of olive oil per rectum. The quantity used for adults should be about a pint at a time, and should be retained in the bowel from 12 to 24 hours if possible. If not returned in this time it may be brought away with an ordinary soap-and-water injection, a fresh dose of olive oil being administered two or three hours later. After a week or 10 days the daily use of the injections can be discontinued, and they are given only when the temperature rises or the bowels are confined. With diarrhœa it is imperative to give olive oil, and those who try it will find it more efficient than opium or any other drug in bringing about a natural discharge of fæces. Occasional small doses of calomel from one-tenth of a grain to half a grain are useful if the oil is not sufficiently stimulating to make the bowels act. I use it now instead of giving olive oil by the mouth, which was found to be too nauseating for better-class patients. My only medicine for typhoid fever, in addition to olive oil and the above-mentioned occasional doses of calomel, consists of carbonate of ammonia, glycerine, and decoction of cinchona given every three or four hours. Whether this preparation has any beneficial effect or not I am unable to say; it has the virtue of being probably harmless, and without the glycerine was a favoured preparation of Percival Pott. With oil injections the bismuth preparations are quite unnecessary. Patients treated in the above manner in my opinion cannot die; for careful observation has led me to believe that typhoid *per se* is a harmless fever, it is the accompanying sapræmia or ptomaine poisoning which produces the ill-effects. Under this line of treatment there are no sequelæ, tympanites, perforations, or heart failure. No cold baths are necessary. The most unskilled nursing is sufficient. Its only drawback occurs in private practice, where patients get well so easily that no credit accrues to the physician. Medical friends in Australia and Canada endorse my opinion as to its value.

I have heard that olive oil given per rectum has been found post mortem in the stomach less than 24 hours after administration; if this is true it is of extreme interest as showing that the beneficial effects of the oil extend above the ileo-cæcal valve. During a visit home last year a bacteriologist hinted that my patients were not suffering from true typhoid fever, but from some fever due to a closely allied bacillus. I can only state that my friend Dr. W. T. Dermer examined a large series of cases here and obtained Widal's reaction in nearly all of them. Large bodies of men, as armies or gold-prospectors, who invade an undeveloped country, are invariably attacked with typhoid fever—witness West Australia, Klondyke, the Cuban campaign, and South Africa. My own hypothesis is that the bacillus present in virgin soil acquires virulence by passage through a series of hosts. An old prospector informed me that he knew of numbers of typhoid-stricken places in Australia which had completely cleared themselves in a few years without any attempt at sanitation. Do the inhabitants and their children acquire immunity or does the bacillus lose its virulence? People alone in the bush, living on apparently virgin soil, can develop typhoid fever. In the case of my own child, aged two and a half years, who nearly died from enteritis (not typhoidal) accompanied by a recrudescence of malaria, and who on recovering from the acute stage daily passed casts of the intestine, the condition was completely cured in from two to three weeks by injections of olive oil, protargol and other remedies having been used in vain.

I am, Sirs, yours faithfully,

OWEN F. PAGET, M.B., B.C. Cantab.

Fremantle, Western Australia, July 21st, 1900.

[1] THE LANCET, August 13th, 1898, p. 409.

## "PROFESSOR LUSTIG'S PLAGUE SERUM."

*To the Editors of* THE LANCET.

SIRS,—I am much indebted to your special Indian correspondent for excusing my "personal attacks"—so he is pleased to call the repudiation of his erroneous assertions—on the plea that "such attacks may be common in debate on the continent of Europe," and in return I cordially sympathise with him on "an extraordinary thing" which happened to him in his reply in THE LANCET of Sept. 22nd, page 903—viz., to pose as a martyr correspondent "who cannot criticise without ignorance or wilful misleading being put forward to explain his opposition," and at the same time to substantiate in a most creditable manner the first of the two alternatives he is complaining of. The present controversy arose from your special correspondent's insinuation in THE LANCET of June 2nd, page 1608, that in the second series of the experiments with Professor Lustig's plague serum *selection or exclusion* of patients was practised. Although from my letter in THE LANCET of

August 11th, page 461, that fact might have been known to him who emphasises his English extraction, he still professes in his reply that we are at issue upon the "construction and reading of the statistics," and innocently repeats twice more "that moribund and convalescent cases were excluded." These assertions—I beg his pardon for betraying again my continental training—are *not correct*. Neither in my paper and letter on the subject, nor in Lieutenant-Colonel Wilkins's letter in THE LANCET of August 11th, page 462, is any mention made of *moribund and convalescent* cases. There is only the plain, intelligible, and correct statement, that in the *second series* of the experiments the cases were not selected but treated *alternately as they were admitted* to the hospital. Tested in this way, which was agreed upon with the municipal commissioner of Bombay in order to obtain results above suspicion and discussion, the serum treatment has given 12 per cent. more recoveries than the ordinary treatment. I can therefore show, as your special correspondent challenges me to do, "a series of cases in which every admission has been included and in which the serum cases show better results than the others." This might satisfy your conscientious special correspondent as to the conditions of the experiments and permit him "to be glad to accept my conclusions," and it ought to end a controversy where the advantage is entirely with me, who can put facts controlled by the responsible authorities on the spot against assertions of a distant and, it seems, an irresponsible special correspondent.

I may be allowed to add that 484 patients had alternately been treated on either side when the experiments were concluded in July last by order of the municipal commissioner, who having satisfied himself that the results are real decided to have the serum manufactured on a still larger scale for the coming epidemic. The staff and stock of the municipal laboratory were therefore increased accordingly, so that at present 25 horses are under immunisation. Finally, I beg to correct a misprint in my letter in THE LANCET of August 11th (page 462), where the recovery rate of the *selected cases* is put down as 33·2 per cent. instead of *38·2* per cent., an error your special correspondent might have found out from my paper which gives the correct figures.

I am, Sirs, yours faithfully,

A. MAYR, M.D.

Municipal Laboratory, Parel, Bombay, November, 1900.

## THE ASSOCIATION OF PHYSICIANS AND SURGEONS (SOCIETY OF APOTHECARIES).

*To the Editors of* THE LANCET.

SIRS,—Referring to an announcement in THE LANCET of Nov. 17th, p. 1461, with regard to the abbreviated titles which may now be used, we wish to remind holders of the licence of the Apothecaries' Society of London that they are still required to sign *death* certificates with the letters L.S.A. as formerly.

I am, Sirs, yours faithfully,

GERALD DALTON,

Honorary Secretary to the Association of Physicians and Surgeons (Society of Apothecaries).

Nov. 29th, 1900.

## THE OPEN-AIR TREATMENT OF PHTHISIS.

*To the Editors of* THE LANCET.

SIRS,—It will no doubt be thought somewhat in the nature of heresy at the present time to question the advantage to be derived from the outdoor treatment of phthisis, but I cannot help thinking that the new idea is likely to undergo considerable modifications, like most other previously proposed suggestions. When a student at St. Thomas's Hospital, now nearly 40 years ago, I noticed that but few of the patients left the wards without having had a cold of some kind—bronchitis or pneumonia—during their time of residence, and there, of course, the windows were kept open night and day. Years ago the climate recommended as likely to benefit phthisis was a sunny, warm, and damp one, such as prevails at Ventnor, Torquay, Cannes, Nice, &c., and no doubt in certain cases this may prove of service; then came a change of view, and cases were advised to go to dry, cold, elevated positions, such as the Engadine, Colorado Springs, &c. The result of this treatment in many cases has been proved to be decidedly beneficial; but now we have come back apparently to the idea that dryness of the air and elevated positions are of little consequence provided the patients have pure air and plenty of it, a view in my opinion decidedly retrograde. Hitherto we have been led to believe that warmth and moisture rather tend to promote germ life, and a particularly rare and cold air tends to increase the bodily vigour and natural powers of resistance. Under any circumstances I should say that in the present experiments two things should be considered—the direction of the wind and the amount of moisture in the atmosphere. The bedstead should always be so placed as to avoid the direct current of any air but from the south or west, and when the air is moist it should be dried by means of wire-framed antiseptic cotton-wool screens and not allowed to come direct into the patient's room. Everybody is well aware that many persons in sound health cannot stand a cold and damp atmosphere, especially at night. A certain number of patients recover under each of the different methods of treatment, but what we want to know are the actual comparative results of the various suggested methods.

I am Sirs, yours faithfully,

F. P. ATKINSON, M.D. Aberd.

Dec. 3rd, 1900.

## ECONOMY IN THE EMPLOYMENT OF COCAINE.

*To the Editors of* THE LANCET.

SIRS,—The prevailing high price, with the occasional personal intolerance of cocaine and its salts, suggested experiments with the view of reducing the quantity employed and increasing its efficiency when used in ear, nose, and throat work. In the first place it was found that a 2 per cent. solution of the *alkaloid* in equal parts of almond and petroleum oil proved an efficient local anæsthetic for the examination of, and slight operations upon, the nose and throat—e.g., passing Eustachian catheter, laryngoscopy, exploration and removal of foreign bodies, &c. Applied either by means of an atomiser or a cotton-wool "swab," although apparently taking a little longer to act, its anæsthesia is more prolonged than that produced by a watery solution: probably owing to the fact that oil is less readily removed by the flow of secretion. With regard to the *salt*, a watery solution containing cocaine hydrochlorate 5 per cent. and sodium sulphate 2 per cent. was eventually selected. This addition of the neutral sodium salt decidedly increases the effectiveness of the cocaine, partly by reason of its penetrating power and partly owing to its solvent action upon the globulins and other proteids which occur in the secretions. The former quality is well illustrated in the influence of Muller's fluid on tissues, the chromic salt penetrating readily under the influence of Glauber's salt. The action of the combined solution proved to be distinctly more rapid, and the anæsthesia was as complete with a proportion of 5 per cent. as with cocaine in much stronger solutions by itself. Economy is effected and the risk of constitutional symptoms is minimised. When either submucous or subcutaneous injection is required, eucain hydrochlorate (5 per cent.) may be combined with 2 per cent. sodium sulphate with equal advantage, but when used as a surface application to mucous membranes, eucaine should be followed or combined with a solution of suprarenal extract, if local ischæmia be desired.

I am, Sirs, yours faithfully,

WYATT WINGRAVE, M.D.,

Physician Central London Throat and Ear Hospital.

Dec. 4th, 1900.

## THE LEAGUE OF MERCY.

*To the Editors of* THE LANCET.

SIRS,—The recent appeal of the Prince of Wales's Hospital Fund to the public for subscriptions raises the question of the wants of the London hospitals. This Fund has been productive of enormous benefit to the hospitals, not only in the direction of financial assistance, but by causing improvements and reforms to be carried into effect. The Prince of Wales's Hospital Fund has mainly been supported by generous donors and subscribers of large amounts.

It is known that there are vast numbers of persons who, willing and in many cases anxious to contribute, are unable to give largely, and to meet these cases the Prince of Wales established the League of Mercy, now founded by a Royal Charter. The constitution of the League is so arranged

that contributions of 1*s.* or upwards may be made through members of the League, who, working under presidents and vice-presidents in all parts of London and the home counties, are in a position to obtain help for the hospitals which would not otherwise be received.

If everyone who does not in any other way subscribe would contribute 1*s.* to the League of Mercy through a member the needs of the hospitals would be supplied. In this way the special appeals from hospitals which from time to time are made would not be required. It would be a distinct advantage if these special appeals could be avoided. They have many objectionable features, one being that they dislocate the sources of charity, as the war and famine funds have done during the past year. It may be stated that every farthing of every shilling given to the League goes direct, without any deduction for expenses, for the benefit of the London hospitals.

The League of Mercy was organised to secure some measure of personal service on the part of a large number of persons who are sufficiently conscious of the value of our London hospitals, and are willing to devote a little time and trouble to bring their needs and the services which they render to the public to the notice of those who have hitherto, from want of opportunity or knowledge, taken no interest in this work. The organisation of the League has now permeated throughout London and the home counties, and we would be very glad to have offers of personal service or to give information as to how good work can be done by anyone who is prepared to give a little time each year on behalf of the hospitals.—We are, Sirs, yours faithfully,

WOLVERTON,
W. J. COLLINS,
J. HARRISON, } Honorary Secretaries.
HENRY C. BURDETT, Treasurer.

Nov. 30th, 1900.

## "THE MICRO-ORGANISMS OF VACCINE MATERIALS."

*To the Editors of* THE LANCET.

SIRS,—I have just seen Mr. Arthur W. Hare's letter in THE LANCET of Nov. 24th (p. 1532) dissociating himself from the conclusions in my paper on "The Micro-organisms of Vaccine Materials." This is not surprising, as I willingly admit that Mr. Hare was a monomorphist of the most severe type from the bacteriological point of view. I must, however, demur to being denounced as a polymorphist of a dangerous type. Mr. Hare says that "a spore is not to be looked upon as a definite cause of disease." May I venture to point out that intestinal anthrax is produced by spores only? The rods appear to lose their active power of producing the disease in the stomach, but the spores pass through the stomach unaltered and germinate in the intestine. The paper appears to be self-explanatory as to my views upon the life-history of a pathogenic micro-organism. Then Mr. Hare pleads for respect to the dictum that "like produces like." Cohn, Brefeld, and Koch do not put it that way. Cohn started from the assumption that each species was characterised by a definite form, but he was not sure whether his form species coincided with natural species. Brefeld, Koch, and others have shown that some species are monomorphous, others show pleomorphism in various degrees, as when spores give rise to bacilli and the bacilli in turn produce spores. The decision arrived at was that there are distinct species of bacteria which may be distinguished by following their development. I claim to be a pleomorphist in that sense, as where this cannot be done form species may not coincide with natural species. My work was chiefly devoted to the definition of the composition of natural vaccine and variolous material and to ascertaining the cause of opacity in lymph, and I am quite prepared to leave it to the tender mercies of the specialists whose aid Mr. Hare has invoked. I am, Sirs, yours faithfully,

Edinburgh, Dec. 3rd, 1900. JOHN B. BUIST.

## "THE USE OF TOBACCO ON ACTIVE SERVICE."

*To the Editors of* THE LANCET.

SIRS,—In his criticism in THE LANCET of Dec. 1st (p. 1612) of your annotation under the above heading Dr. R. Martin accuses its writer of basing his opinion "on the flimsy ground of mere hearsay," but is his own eye free from motes? Dr. Martin asserts "that where healthy men have undergone severe fatigue in the open air they will speedily sink into profound repose, when the fitting time arrives and opportunity serves, however scanty the diet may have been." Now, according to my experience—and I have been through several campaigns—many men on service are afflicted with insomnia, especially, though by no means exclusively, when new to the conditions. There is such a thing as being over-tired, and when excitement is added sleep of any kind, let alone "profound repose," is often wooed in vain. Then it is that the value of a pipe becomes priceless, as it induces refreshing sleep. I believe also that tobacco is a great aid to digestion in men who have to live and to work hard on unusual food, such as biltong or "bully beef," and so far from drying and irritating the fauces "the fumes" are well known among soldiers as a thirst-quencher in the absence of water. In order to pose consistently as one who has not "meddlesomely tampered with nature's kindly process" a man should, amongst other things, go naked, eschew cooking, and leave his chin unshaven. We live artificial lives, and to base an argument on the kindness of nature is a slap in the face to civilisation.

In conclusion, I should like to know Dr. Martin's authority, beyond hearsay, for his assertion that "the best shots at Bisley are almost invariably non-smokers." My recollection does not tally with this positive statement.

I am, Sirs, yours faithfully,

Dec. 3rd, 1900. PYRAMID.

## REPORT OF PLAGUE IN CALCUTTA.

(FROM A CORRESPONDENT.)

A REPORT nominally by the Chairman of the Board of Calcutta has recently been issued. As the officer in whom all power is vested the report comes from him, but it is based on the work of the plague department. This department has been successively presided over by Mr. J. Nield Cook, Major Green, I.M.S., and Major Deane, R.A.M.C., all of whom contribute their several quota to the volume. The chairman's portion is a compilation from, and summary of, the other reports. The striking feature of this record consists in the abandonment of every plague measure except that of disinfection. At no time during the epidemic has anything else been enforced. Patients have not been compulsorily removed, contacts have not been segregated, evacuation has been untried, and inoculation has only been sought by a few. Until the present year Calcutta has not had a serious outbreak, so that the absence of strict measures can hardly be said to have facilitated the progress of the disease. The total estimated mortality from plague since its first official announcement in 1898 is only 13,000. The people have sickened and died in their own homes, and as there has not been any compulsory disturbance of the privacy of the home it is not surprising to find that less than 20 per cent. of the returned cases of plague were seen during life. The system of investigation seems as complete as it can possibly be. Every death reported to the registrar is submitted to the district medical officers who, with their assistants, institute inquiries from the relatives, friends, and neighbours into the course of the illness. By this systematic examination a certain number of deaths are returned by the district medical officer as due to plague, others are returned as suspicious, and the remainder as not suspicious. So thorough has this method been that the excess mortality of any period can be accounted for by the plague and suspicious deaths. Where so large a proportion of the population die without any medical attendance whatever it is impossible to adopt any more accurate method. All the work of the epidemic has fallen on the plague department, as very little assistance has been given by householders, medical practitioners, or influential natives. Less than 5 per cent. of the cases went voluntarily to the two general hospitals.

Inoculation can hardly be said to have had a fair trial in Calcutta. Little or no encouragement has been given to it and less than 500 operations have been done during the past two years. It may truly be said that disinfection of the houses has been the only policy pursued. This has been carried out for every suspicious death and latterly on a wholesale scale for nearly every street in the city.

An innovation of great importance consists in allowing and indeed persuading the people to return to their rooms immediately after disinfection. This practice is adopted on faith in the value of disinfection and with the object of reducing inconveniences for householders to a minimum. The other striking plan adopted in Calcutta has been the wholesale disinfection of streets and large collections of houses. This is known as "extra disinfections." The idea appears to be to anticipate a further outbreak by destroying any poison which may be lying latent. It is a great experiment, and the value of disinfection for an Indian city, in the case of plague at any rate, must stand or fall by the results in the near future. The amount of perchloride of mercury which is being daily used must be enormous. It must be understood that this wholesale disinfection has not been done while the outbreak was raging, but since.

The report contains many interesting tables of mortality and maps showing the localisation of the disease to certain parts of the city. I note an almost complete absence of the clinical aspects of plague. This is due to the absence of facilities for observation, practically no hospital being kept up by the plague authorities. Neither is there any record of bacteriological work—probably for the same reason. In Major Deane's report I note an undertone of doubt upon the value of all bacteriological work with regard to plague. This is exceptional, but I trust that its influence will not be injurious. The volume before me is purely a record of plague administration and consists very largely of the work done in the way of disinfection. It is, perhaps, too early to gather the value of the scheme so recently adopted, but while a cleansing of the city must do good I do not feel so sanguine of the results as the main authors of this report. In fact, I find the chairman himself writing: "I am much afraid that all our efforts will not prevent the occurrence of a more serious epidemic than any yet experienced." There are many other points in the report to which it is hardly necessary to refer, as certain sections of all plague reports are more or less like each other. The influence of rats in the spread of plague is discursively dealt with at the end of the volume. I do not gather that any new facts have been observed but a general doubt is expressed as to their power of diffusing the disease. They are looked upon by the authors more as companions in trouble than as affecting the spread of infection to man. With the evidence obtained in other parts of the world I cannot subscribe to this view.

Taking the report as a whole it must be admitted that the subject matters taken up have been adequately treated. There are many points omitted, however, which might have been included.

## NOTES FROM INDIA.

(FROM OUR SPECIAL CORRESPONDENT.)

*Variations in the Incidence of Disease in Different Parts of India.—Objections to Some Statements on Plague Symptoms.—Military Rank or the Title of "Doctor."—Further Increase of Plague in India.*

A RETURN of the various operations performed in the different provinces of India, and published by one of your Indian contemporaries, brings out the curious frequency of certain diseases in some parts and the rarity of the same diseases in others. Cataract, for example, so common in the North-West Provinces, and to a lesser degree in the Punjab, is comparatively rare in Madras. Stone, which is so frequent in the Punjab, is also rare in Madras. Hydrocele is a wide-spread disease in India and is said to be a common complaint—much more so than in Europe—but the returns show a peculiar infrequency in the Punjab. Obstetric operations are as frequently performed in Madras as in the other provinces, but cases of ovariotomy are exceptionally few. They are much more numerous in the North-West Provinces and the Punjab. Taking India generally I may add other differences to the incidence of disease as compared with the British Isles. Appendicitis seems to be extremely rare in India. On the other hand, hæmorrhoids are particularly common. Boils and carbuncles are much more frequently met with than at home. One writer in the *Indian Medical Gazette* says that they may be epidemic in character, that they are contagious from one person to another, that they are locally contagious from one part of the body to another, and that there is an infection of the house as shown by successive inhabitants being attacked. Acute rheumatism is very uncommon in India and cancer is not so frequent as in Europe. A recent investigation into the large amount of cases of fever following the famine shows that typhoid fever and Malta fever do occur amongst the natives of India. The occurrence of typhoid fever has been recognised for some years by the younger generation of practitioners, but is still accepted with hesitation by the older school.

Exception would probably be made by those in India who have had most experience of plague to some of the statements made by recent writers at home. It is stated, for example, that the most potent agent in the spread of the disease is undoubtedly contact with infected persons. This is not borne out in India, for the low contagious properties are recognised everywhere. Cases in one family or household are nearly always simultaneous or nearly so—not successive at intervals as if caught one from another. The percentage of cases among "contacts" is extremely small—less than 4 per cent.—and the occurrence of cases amongst friends and relatives visiting the sick in hospital is uncommon. Amongst native attendants it may almost be said to be rare. Then it is said that boils and carbuncles in plague are rare. While it is true that these complications vary at different places and in successive outbreaks their occurrence was by no means uncommon both in Bombay and Poona in the first two years of the epidemic. Again, it has been stated that suppuration takes place in and around the glands at an early date. This is quite incorrect. Breaking down and sloughing occur, but true suppuration is certainly delayed for a week, generally longer.

A recent article by Dr. Balfour Stewart of Liverpool treats among other matters upon the value of Lustig's serum in the treatment of plague. My previously expressed opinions and criticisms upon which you have permitted a long discussion in your columns are fully confirmed. Dr. Stewart had exceptional opportunities of judging while on duty in Bombay. The classification of plague into eight types is, to say the least, confusing. For all practical purposes the division into bubonic, septic, and pneumonic, is ample, and will include every case, so that to add nervous, toxic (or fulminant), puerperal, and two mild types is unnecessary.

A curious custom has gradually been adopted by the officers of the Indian Medical Service holding civil appointments and carrying on private practice in Calcutta in giving themselves the title of "Doctor" rather than that of their military rank. In most other places the surgeon has his rank stated on his name board, but in Calcutta Dr. —— without any other title is used. Possibly the gradual development of competition with purely civilian practitioners explains this custom.

There has been a considerable increase in the mortality from plague throughout India during the past week. The number of deaths given is 2943, an increase of 795 over that of the previous seven days. The disease is worse in the Bombay Presidency, 2663 deaths being recorded. Bengal returns 242 deaths, of which 11 occurred in the Sarun district.

Nov. 16th.

## LIVERPOOL.

(FROM OUR OWN CORRESPONDENT.)

*The Health of the County Palatine.*

THE annual report of the medical officer of health of the county palatine (Mr. E. Sergeant) contains a regret that the gross death-rate (17·6 per 1000) does not compare favourably with the previous year, although it is below the county average for the ten years ending 1898. The increase in the death-rate is due to an increase in the number of cases of influenza and affections of the respiratory organs. The birth-rate shows a slight diminution as compared with 1898. Increased attention has been paid to the carrying out of sanitary work in the county, with the result that 37,866 nuisances have been abated in the districts. House-to-house inspection has been carried out systematically and 200 houses have been condemned as unfit for human habitation. Under the Sale of Food and Drugs Act, 1557 samples have been analysed, of which 195, or 12·52 per cent., were found to constitute offences against the Act. The report states that the Vaccination Act, 1898, has worked on the whole in a satisfactory manner, and there is no reason to fear a falling-off in

the percentage of vaccinated children in consequence of the new provisions. With regard to slaughter-houses it is stated that on the whole they have been carefully inspected, but complaints are made by the medical officers of health as to the difficulty of supervising in a satisfactory manner private slaughter-houses. Mr G. H. Patterson, medical officer of health of Ulverston, says that "it is a great pity that vested interests should continue to stand in the way of the provision of public abattoirs which in every respect would be a decided improvement upon the plans which at present obtain." In a very interesting appendix Mr. Sergeant has dealt at some length with the question of the prevalence and prevention of tuberculosis with especial reference to the establishment of sanatoria. In order to understand the magnitude of the question as affecting Lancashire it may be stated that during the year 1899 the deaths from phthisis numbered 2305, and assuming that an average period of three years elapses from the reception of infection and death there is reason to believe that the persons affected with phthisis living in that year within the administrative county would be equal to three times the number of deaths, or from 6000 to 7000.

*The Assize Dinner.*

Among the guests at the recent annual assize dinner given by the Lord Mayor to the judges of assize was Sir William Mac Cormac, Bart., who defended in a vigorous speech, which was highly applauded, the administration of the Army Medical Department in South Africa.

*A Memorial to Principal Oliver Lodge.*

The plaster study for a bust in marble of Dr. Oliver Lodge, until lately professor of physics at University College, has just been completed. The bust, which has been commissioned by a number of Dr. Lodge's friends and admirers, will be placed in the hall or library of University College as a memorial of his association with the institution. Mr. C. J. Allen, a local sculptor, to whom the work has been entrusted has managed to effect a striking likeness of Dr. Lodge.

*Poisoned Beer in Liverpool.*

In common with Manchester and other places a scare has been caused in Liverpool with reference to cases of peripheral neuritis treated in the hospitals and supposed to have been caused by drinking poisoned beer. On Sunday, Dec. 2nd, the death occurred of a woman in the Mill-road Infirmary from alcoholic neuritis associated with symptoms of arsenical poisoning. The deceased, who had been a patient in the hospital for about a fortnight, had been a heavy beer-drinker. The deceased's urine was examined by Dr. Nathan Raw, the medical superintendent, and traces of arsenic were discovered. Two or three additional cases have occurred at the same institution, bringing up the total to a little over 60 cases treated at Mill-road. The result of the analyses of beer conducted by Dr. Campbell Brown at the instance of the health committee has led to the discovery that the arsenic present in the beer is traceable to the glucose sugar used at certain breweries. The Liverpool brewers are doing everything in their power to facilitate the work of the authorities in fathoming what seems to be a mystery. Some brewers, to their credit, rather than run any risk, have emptied large quantities of suspected beer down the sewers. In the cases of the samples of beer brewed by two or three brewers which have been analysed at their own request, Dr. E. W. Hope, the medical officer of health, has informed the brewers of the results of the analyses. Dr. Hope intends to embody all the results of his analyses in a comprehensive report which will be presented to the health committee at the earliest opportunity.

Dec. 4th.

## SCOTLAND.

(FROM OUR OWN CORRESPONDENTS.)

*Mr. H. E. Clark on the South African Hospitals.*

MR. H. E. CLARK, professor of clinical surgery at St. Mungo's College, Glasgow, who has recently returned from South Africa, delivered his presidential address at the last meeting of the Glasgow Medico Chirurgical Society and not unnaturally selected as his subject some of his recent experiences at the seat of war. He remarked at the outset upon the prominent part played by volunteers in rendering aid to the various departments of the army and more especially to the Army Medical Service. Among such volunteer efforts he claimed a prominent position for the Scottish Red Cross Hospital, of which he had had the honour to be senior surgeon. After a rapid sketch of his experience at Bloemfontein, which he reached immediately after the town came into the possession of the British, Mr. Clark proceeded to refer to the so-called hospitals scandal. Upon this subject he complimented the Director-General and his subordinates that in spite of the well-known fact that the Royal Army Medical Corps had been under-staffed with medical officers for years, and in spite also of the serious miscalculation which had been made at the commencement of the war as to the number of troops which would be required, the medical authorities had never failed to send out with each division of the army the recognised equipment of field, stationary, and base hospitals with a full complement of surgeons, nurses, and orderlies. The medical authorities it must be admitted, had not anticipated the terrible outbreak of enteric fever, which converted Bloemfontein in April last into a gigantic hospital camp. Even if they had expected this outbreak he doubted if much could have been done in the way of preparation. Obviously, it was impossible to set up hospitals in Bloemfontein before the town was in the hands of the British and it was equally impossible that general hospitals with their enormous equipment could accompany General French in his lightning march to Kimberley or in the subsequent advance on Bloemfontein. Hence the army entered the latter town with a large and constantly increasing number of cases of enteric fever having none but field hospitals for their treatment. It must be remembered that enteric fever was always present in towns in South Africa and it had been spread among the troops to a terrible extent by the men drinking the water of the Modder river which was so polluted that it was little better than liquid sewage. When the town was occupied the only communication with the main base at Cape Town was by a single line of narrow-gauge railway which was frequently destroyed in places by the enemy, who held possession of the country to the immediate south of Bloemfontein for fully a fortnight after the occupation of the town. It was amidst such transport difficulties that the medical staff had to work, their claims for material being necessarily second to the primary demand of the army for food and ammunition. Just as the conditions seemed to be improving came the crowning disaster of Sanna's Post which cut them off from the Waterworks and compelled them to fall back upon the wells in and around Bloemfontein at all times suspect but at that time more polluted than ever. Mr. Clark claimed that great credit was due to Surgeon-General W. D. Wilson and his subordinates for what they accomplished under these trying conditions. Everyone admitted that many things were not as could have been wished, but if any fault existed this did not lie with the medical staff, the War Office, or the Government. It depended on the fact that war is war and could not be carried on without distress and suffering on the part of the whole army, in which the sick and wounded must needs participate. The state of matters which some critics would appear to demand would only be attained by sending general hospitals in advance of the army into those towns which were subsequently to be occupied—an obvious *reductio ad absurdum*. Many of the charges brought against the medical arrangements related to the base hospitals in the neighbourhood of Cape Town, where the difficulties of which he had spoken did not exist. But these charges had notoriously broken down, and it would be found when the report of the Hospitals Commission was issued that the hospitals at Wynberg, Rondebosch, and Woodstock had been cleared of the aspersions which had been cast upon them and that the work which they had accomplished had been great in amount and excellent in quality. Mr. Clark's address attracted a large audience who gave him a very cordial welcome on his return to Glasgow.

*Dispensary Abuse in Glasgow.*

The abuse of public dispensaries is an old grievance in this and other cities; lately, however, feeling in Glasgow has become so acute that the Southern Medical Society have considered it necessary to appoint a committee of their members to investigate the matter and, if possible, to suggest a remedy. There can be no doubt of the existence of this abuse of our infirmaries by those who are well able to pay a fee, particularly in the outdoor departments of the general hospitals and the special hospitals. It is understood that as it is the Southern Medical Society which has taken the question

up, the Victoria Infirmary is the institution specially aimed at, and it is certain that in the south-western districts, supplied by that infirmary's dispensary, discontent and grumbling are very general among the younger practitioners. The question is one of great difficulty and it will be interesting to see whether the Southern Medical Society will be able to suggest a practically workable remedy. The suppression of the abuse complained of would not only benefit the practitioner, but would prevent the diversion of hospital funds into channels for which they were never intended by testators and subscribers, would lessen the pressure of the chronic poverty of our infirmaries, and would enable such institutions to accomplish more work among the deserving poor.

Dec. 4th.

## IRELAND.

(FROM OUR OWN CORRESPONDENTS.)

*Death of Joseph Radford Cardiff, M.D. Glasg., L.R.C.S. Irel., Coroner for South Wexford.*

THE death of this well-known and highly esteemed country physician took place on Nov. 19th at his residence Carrigbyrne, near the town of Wexford. Dr. Cardiff was an M.D. of Glasgow and a Licentiate of the Royal College of Surgeons in Ireland. He filled the office of coroner for the Southern Division of County Wexford for many years, and was widely known as an active practitioner until four months ago, when a severe attack of gout, from which disease he had suffered periodically for many years, confined him to his house. His death will be much felt over the wide country district to which his practice extended.

*The Coronership of South Wexford.*

The vacancy in the coronership of South Wexford caused by the death of Dr. J. R. Cardiff, is about to be filled, one of the candidates being the Nationalist Member of Parliament for the division. If Mr. Ffrench be elected it is understood that he will resign his seat in the House of Commons in favour of Mr. T. D. Sullivan, a well-known Nationalist recognised as the Poet Laureate of political Ireland.

*Health Lectures at Queen's College, Belfast.*

In accordance with the requirements of the founder of the chair of Physiology in Queen's College, Belfast, Professor W. H. Thompson is giving a series of popular lectures on the Nervous System: its Functions and their Relation to Health. They commenced on Nov. 28th and are fully illustrated.

*Annual Dinner of the Ulster Medical Society.*

The annual dinner of this society was held in the Prince's Restaurant, Belfast, on Nov. 24th. The President (Professor W. H. Thompson) occupied the chair and there were between 50 and 60 members present. The guests were: the President of Queen's College, Belfast, the President of the North of Ireland Branch of the British Medical Association (Professor J. W. Byers), the Right Hon. the Lord Mayor of Belfast (Sir R. J. McConnell, Bart.), Professor Rubert W. Boyce (University College, Liverpool), and Lieutenant-Colonel R. G. Thomsett, R.A.M.C. After an excellent dinner had been served, the President proposed, in very happy terms, the toast of "The Queen," which was received with great loyalty. Dr. J. Walton Browne gave the "Navy, Army, and Reserve Forces," to which Lieutenant-Colonel Thomsett, principal medical officer of the Belfast district, replied. Professor J. Symington proposed the toast of "The City and Trade of Belfast," which was responded to by the Right Hon. the Lord Mayor. "The Queen's College and Belfast Medical School" was proposed by Professor Rubert Boyce of University College, Liverpool. The President of Queen's College and Professor T. Sinclair replied. Dr. W. A. McKeown proposed "The British Medical Association," to which Professor Byers, President of the North of Ireland Branch, responded. "The Health of the President of the Ulster Medical Society," which was a toast received with the utmost enthusiasm, was proposed by Dr. W. Calwell. Professor Thompson having replied, Dr. James Colville gave "The Health of the Honorary Secretary," to which Mr. Robert Campbell, responded. During the evening excellent recitations were given by Dr. Andrew Fullerton and Dr. J. S. Morrow, and, through the kind introduction of Dr. J. St. C. Boyd, one of the prominent supporters in Belfast of the Feis Ceoil, a well-known Irish piper, Mr. R. L. Mealy, gave two excellent musical contributions. Altogether the banquet passed off most successfully.

*Death of Reuben Bolton, M.D. R.U.I., J.P.*

I regret to announce the death of Dr. Reuben Bolton, J.P., of Bangor, Co. Down, which took place suddenly on Nov. 20th. Shortly after 1 P.M. on that day he was discovered in an unconscious condition in the hall of the dispensary in Bangor, where he had gone to prepare medicines which some of the dispensary patients were to call for. During the morning he had attended to his duties as usual, having visited three patients, including a maternity case, before proceeding to the dispensary. He had for some time been suffering from heart disease and some four months ago he had a serious seizure from which he seemed never to have recovered thoroughly. Born in Dungannon Dr. Bolton entered Queen's College, Belfast, where he was a most distinguished student and scholar. He graduated M.D. of the old Queen's University in 1865. For a time he practised in Belfast, but going to Bangor 25 years ago he was in 1878 appointed medical officer of the Bangor district of the Newtownards Union. He was also medical officer to the Royal Irish Constabulary and surgeon to the Bangor Cottage Hospital. He took a great interest in Masonic affairs. He was a magistrate for Co. Down. Genial in his manner, kind to his patients, and of a most sociable disposition, Dr. Bolton was greatly liked. He leaves a widow and four children, three girls and a boy. He was buried on Nov. 22nd.

*Dublin Medical Students.*

The anatomical returns of students who have entered for dissection have been made up to Nov. 25th, 1900. The total shows a falling off of one as compared with the returns of last year—viz., 422 as against 423.

*Cork Hospital Saturday Fund.*

The Cork Hospital Saturday collection was a distinct success this year. A new feature was the inauguration of local collections in two of the county towns—viz., Bandon and Midleton—where the amounts received were very satisfactory. Last year no street collections were made, but this year, owing to the energy displayed by all concerned, the amount realised was nearly double that collected in the year 1898. At a meeting of the committee held last Friday the honorary treasurer's statement showed that the total amount available for distribution was £976. It was allocated as follows:—North Infirmary, £195; South Infirmary, £195; Mercy Hospital, £141; Women and Children's Hospital, £78; Cork Fever Hospital, £78; Eye, Ear, and Throat Hospital, £74; St. Vincent's Hospital for Women and Children, £58; St. Patrick's Incurable Hospital, £57; Lying-in Hospital, £50; Cork Maternity, £50. Votes of thanks were passed to the ladies who had made the street collections, to the several officials of the committee, and also to the Lord Mayor and Lady Mayoress. There is no doubt that his lordship and the Lady Mayoress by their whole-hearted zeal contributed largely to the very gratifying success of this year's collection.

Dec. 4th.

## PARIS.

(FROM OUR OWN CORRESPONDENT.)

*The Drinking-water Question.*

THE question of the Paris supply of drinking-water has entered on a new phase. In reply to the cogent arguments of the Academy of Medicine, of the Committee of Hygiene, and of the learned societies, the authorities of the municipal water-supply have hitherto put forward nothing but promises and announcements of great works to be carried out at some future date, which, however, would without doubt satisfy in every particular the medical men. The only thing was that these magnificent projects either never came off or else were carried out in a very different style from that which had been agreed upon. To put the matter shortly, the engineers acted exactly as they thought fit while hiding their rebellion under a pretence of fine words. They have now given up even a show of agreement with the medical authorities and have declared open war. The Prefect of the Seine, in replying to the resolutions passed by the Academy of Medicine, has met

them with a flat denial and the engineers proclaim for the future their pretence of insuring the water-supply of the city without paying the slightest attention to the views of the Academy of Medicine or to those of the professional hygienic authorities. This is how the matter came to a head. The "water lords" (*administration des eaux*), instead of finding new springs, found it much simpler to construct, near Paris, filtering beds into which water from the Seine should be led. This water after passing through beds of sand and gravel passes into reservoirs from which it is distributed to people as drinking-water at times such as when the spring water-supply fails. This, of course, is during very dry weather and it is precisely then that the Seine is lowest and consequently most befouled and its water most difficult to render fit for drinking by any filtration process. In my letter published in THE LANCET of Nov. 24th, p. 1538, I gave your readers an account of how this custom was criticised by the Council of Hygiene and of the confession which the chief engineer had to make how during a period of three weeks during this summer Seine water was mixed with spring water and that the period of admixture coincided with a recrudescence of typhoid fever. The Academy of Medicine in its turn has sent a resolution to the Prefect of the Seine setting forth that the necessary measures ought to be undertaken without delay for insuring a complete separation between spring water and filtered river water, and moreover that the water of the Seine should be supplied at such a pressure that it could be used by the inhabitants of Paris for such purposes as lifts, washing, and watering. Owing to the low pressure at which the river water is supplied spring water has to be used for these purposes. The Prefect's reply is simply amazing. According to him spring water and filtered river water have been for a long time delivered by quite separate services. He refuses to use the filtered Seine water as the Academy demands for industrial purposes and this for a most remarkable reason—namely, because the filtration necessitates a series of delicate and difficult operations which would, if the water were used for industrial purposes, simply result in a loss. He might just as well argue that the "water lords," having already made a grave mistake in adopting this gross method of filtration in face of the protests of the Academy and the Council of Hygiene, suggest that the water should be used so that the expense to which they have been put for purification should not be wasted. The defence of the water from an alimentary point of view is undertaken as follows. The filtered water, says the Prefect, has been certified as being perfectly wholesome in numerous analyses made by the chemists of the official laboratories, and contains, as a matter of fact, fewer bacteria and less organic matter than does spring water. The whole of suburban Paris and many large cities, notably London and Berlin, are supplied with filtered river water for drinking and the public health does not thereby suffer. In fact, adds the Prefect, the mortality in cities so supplied is no higher than in cities supplied with spring water. As for supplying river water at high pressure the Prefect ignores this question entirely on the ground that it is concerned with technical and administrative details with which the Academy of Medicine has nothing to do. The Academy naturally protests vehemently against this high-handed way of treating its resolutions, and M. Henriot has again lifted up his voice against the assumption of the engineers that Seine water is fit for drinking. In the present state of bacteriology a bacteriological examination is not enough to affirm the purity of a water, and nothing is more dangerous than to rely on laboratory researches, however numerous they may be. Typhoid fever possesses an organism which reacts much more delicately to it than any organism known in the laboratory—namely, the human body—and the people of Paris would have been spared the sad experience of the last two years if the prefectoral administration had seen fit to forbid absolutely the admixture of river water and spring water. M. Henriot concluded by deploring the pig-headedness of the engineers, by sticking to their system, in compromising the interests of public health and rendering of no effect the enormous sacrifices which the city of Paris has made to keep itself free from typhoid fever. M. Brouardel agreed with him. The debate concluded by the appointment of a committee charged to lay before the Prefect of the Seine the resolutions of the Academy in a yet more urgent form.

*Penetrating Gunshot Wounds of the Cranium.*

The Society of Surgery has again had this subject under consideration. Opinions were much divided. With reference to the use of the x rays for diagnostic purposes M. Tuffier considered that these rays should not be used directly after the infliction of the injury. M. Reynier, on the other hand, thought that they could be used with safety without delay, and that by the use of M. Contremoulin's arrangement the position of projectiles could be easily located. As for treatment there were two main currents of opinion—one in the direction of simply enlarging the wound of entry, removing fragments and making the trail of the bullet aseptic, but not searching for it unless there were grave cerebral symptoms; the other view looked upon the bullet itself as a septic body and that it should be removed, if possible, as long as it lay within easy reach.

Dec. 4th.

## ROME.

(FROM OUR OWN CORRESPONDENT.)

*The Question of Priority in the Mosquito-Malaria Theory.*

THE *Policlinico* of Nov. 1st, in publishing a letter from Major R. Ross, I.M.S., on this subject, says by way of preface that "scientific discoveries do not usually gush forth ready-made from the mind of genius, but are the fruits of the activity of many energies which unite the elements more or less directly serviceable to attain the desired end. Whether the greatest credit is due to him who initiates the work, or to him who prosecutes it most successfully, or to him who synthesises and presents it in the best form, is always a subject of discussion in regard to everything new. No wonder, then, that such a dispute should arise around a doctrine so important both in its scientific bearings and its immediate practical application as that which aims directly at the reclamation from malaria and utilisation of immense tracts of territory hitherto waste. The *Policlinico* is glad to open its columns to such questions and to men of such worth. No preconceived scientific opinions, neither personal considerations, nor a blind patriotism, nor servility towards foreigners will hinder it from keeping the controversy to the region of facts." It is indeed no more than fair that the Italian scientific world, which has hitherto heard only one side of this question, should now get the opportunity of bearing the other and so be in a better position to apportion merit to those who deserve it. Major Ross has many complaints against Professor Grassi, who, he says, in his recent work, "Studi di un Zoologo sulla Malaria," seeks to discredit the former's researches on malaria in order to gain unmerited credit for himself. Major Ross thinks that many persons in Italy who are not acquainted with the true facts may be misled by these plausible statements of Professor Grassi which he characterises as a tissue of disingenuous fallacies and a contortion of the facts with omissions of dates and attacks upon his (Major Ross's) veracity. He then recalls the different steps in his work dating from May, 1895, his first unsuccessful attempts to cultivate the parasite in culex, followed in August and September, 1897, by his success with semilunar bodies in anopheles; the interruption of his experiments at this point and their resumption a year later when he successfully demonstrated the extra-corporeal life-cycle of hæmosporidia of birds in mosquitoes and infected healthy birds experimentally by means of the bites of these insects; and finally, after a second interruption of his labours, the publication of his results by Manson and himself on June 18th, 1898—a date a month in advance of the time at which Professor Grassi, by his own account, commenced his work on the relation between malaria and mosquitoes, and fully four months before he and his colleagues could show any result. And this success they only obtained by following Major Ross's methods and profiting by his observations, previously to which Professor Grassi and his friends had been lost in a maze of error. Even Professor Grassi's pretence that Major Ross had not indicated the anopheles as the definitive host of the parasite falls to the ground, for he himself had evidently recognised it from Major Ross's description of his "dapple-winged mosquito," as appears from several circumstances, but more especially from a letter dated Nov. 25th, 1898, written to Major Ross by Dr. Charles of Rome, in which the latter states that he had found Professor Grassi in his laboratory intently reading Major Ross's letter to the

*British Medical Journal* of Dec. 18th, 1897, and that Grassi appeared to be convinced that the description of the mosquito therein given referred to the anopheles claviger. Indeed, a few hours afterwards, according to Dr. Charles' Professor Grassi found some of the zygotes derived from semilunar bodies in the anopheles claviger. It is absurd, then, Major Ross contends, for Professor Grassi to arrogate to himself the merit of the original discovery simply because he had confirmed it. In conclusion, Major Ross appeals to the recognition accorded to him in the matter of priority by such authorities as Laveran and Blanchard in France, by Koch in Germany, by Manson and Nutall in England, by Celli in Italy, and by the *Indian Medical Gazette* in India.

*Medullary Anæsthesia.*

At the second sitting of the Italian Surgical Society a discussion was opened by Dr. Fummi on Bier's method of cocainising the spinal cord, by a reference to 40 cases operated on under Professor Montenovesi's direction at the Santo Spirito Hospital. The point he wished to dwell upon was the attempts to extend the anæsthesia to the higher parts of the trunk and to the upper extremities. By experiments on dogs and on the cadaver it was sought to determine why a liquid of the specific gravity of 1014 (which is nearly that of the ordinary 1 per cent. solution of cocaine) cannot ascend to the upper portion of the spinal cord even when the body is placed in a strongly inclined attitude head downwards. It appeared that the reason lies in the difference of specific gravity between the cocaine solution and the cerebro-spinal fluid. By using a solution of cocaine in glycerine the alkaloid was found to reach the highest point of the cerebro-spinal canal, being detected by the very delicate method of Grefel even in the cerebral ventricles. This was still better seen with solutions of methyl blue in glycerine. The first application of this glycerine solution of cocaine to the human subject was followed by distinct anæsthesia of the thorax, neck, and upper limbs. Immediately after the injection the patient was placed in the inclined position and he soon began to experience a sensation of formication and heat advancing from the abdomen to the thorax and thence to the neck and arms. Further observations will be reported later; meanwhile, the trials are being continued in Professor Montenovesi's wards. Bastianelli and Fioretti related their experience of this method of anæsthesia, the former from a total of 35 cases, the latter from 25 cases. Bastianelli gave as cases suitable for its employment operations on the lower extremities, laparotomies, and uncomplicated hernias; and as contra-indications, the need for full muscular relaxation, nervousness, the age of infancy, extensive abdominal operations (on account of the sensitiveness retained by the peritoneum), states of collapse, &c. On the whole, the discussion showed that the method is taking up a recognised place here, and that the variety of surgical procedures in which it may be employed is rapidly increasing.

Dec. 1st.

## CANADA.

(FROM OUR OWN CORRESPONDENT.)

*Politics and the Profession.*

A GOOD many members of the medical profession have been returned to Parliament in the recent general elections held on Nov. 7th, and some notable ones have fallen in the fight. Amongst these is the venerable and virile leader of the Conservative party, Sir Charles Tupper, who has since announced his retirement from public life. At the age of 34 years, Sir Charles, then Dr., Tupper forsook a lucrative and growing practice in his native province of Nova Scotia for politics, and rapidly attained a commanding position in the councils of his country. At Confederation in 1867 he took a prominent part in the formation of the Canadian Medical Association and was unanimously elected its first president, which office he successfully filled for the two succeeding years. At the age of 80 years he has exhibited in the recent campaign a wonderful vitality, and his loss will be a keen one to the Conservative party as well as to the country. In many public works, this Canadian practitioner has left his lasting mark. The profession throughout the Dominion is congratulating itself that Dr. T. G. Roddick, the promoter of the Dominion Medical Council Bill, has been able to retain his seat in Parliament by a narrow majority. Speaking recently at a banquet tendered in his honour Lord Strathcona paid a high and deserving tribute to Dr. Roddick for the good he was seeking to accomplish in bringing about this Dominion registration, stating that the public were beginning to take an interest in the measure, as it would be another means of knitting the provinces together in closer bonds of union. The medical profession can now look forward confidently to important progress being made in this direction at the next meeting of the Dominion Parliament.

*Vital Statistics in Ontario.*

By the returns last year from the Registrar-General's office for the province of Ontario the birth-rate was shown to have decreased considerably as compared with the previous year. At that time it was thought that the apparent decrease might be due to defective returns, so an extra effort was put forward to remedy this laxity on the part of parents, but the returns for 1899 exhibit a still further decrease. The births in Ontario last year (1899) numbered 44,705 as compared with 46,599 in 1898, a decrease of 1894. On the other hand, the marriages exceeded those of the previous year by 1139, the figures being 16,514 as compared with 15,375 in 1898. The deaths for 1899 number 28,607, as against 26,370 in the preceding 12 months, or an increase for the former period of 2237. The birth-rate was 19·4 per 1000 in 1899, as compared with 20 4 in 1898; the death-rate was 12·4 per 1000, as against 11·5; and the marriage-rate was 7·1 per 1000, compared with 6·70.

*Toronto General Hospital Training School for Nurses.*

The annual graduating exercises of this institution were held on Nov. 9th, when 13 graduates received their diplomas. This institution was established in 1881 with 16 pupil nurses, and since that time 317 have graduated, 223 of whom are still actively engaged in the practice of their profession, many of these being employed in the neighbouring Republic, as Canadian nurses are much sought after by the hospitals of the United States. A new and handsome residence has just been completed for the nurses, of whom there are now eight probationers and 59 pupil nurses, at a cost of £4000 ($20,000) which is the finest of its kind in the Dominion. The lady superintendent stated that during the past year she had received 650 applications, of which only 25 were granted. The course of training in the school lasts for three years and during that time a pupil nurse receives $4, $5, and $6 per month respectively, board and washing being also supplied.

*Home for Incurable Children, Toronto.*

This deserving institution was started in September, 1899, when Senator Cox presented the lady philanthropists who were undertaking the work with a fine house in a residential quarter of the city for a home. In December last this was formally opened with the reception of two little patients. At the first annual meeting held a few weeks ago the secretary's report showed that during the past year 13 children had been admitted, and of this number 10 now remain, two having died and one having been transferred to the Orillia Asylum for Idiots.

*The Consumption Sanitarium for Toronto.*

Toronto is making an earnest effort to establish a sanitarium for her consumptives. The medical health officer, Dr. Sheard, has just reported on the subject to the effect that as soon as the Anti-Consumptive League of Ontario or the National Sanitarium Association, which controls the Muskoka Cottage Sanitarium, provides a fund of $50,000, the city should submit a by-law to the ratepayers for authority to contribute a like sum. Dr. Sheard further stipulates for the city that the institution must be located within 30 miles of the city and that the grounds surrounding the same must not be less than 50 acres in extent. Mr. Gage, the treasurer of the national organisation, who was instrumental in founding the Muskoka Sanitarium, has now come forward with an offer to construct and to equip the hospital at the expense of the National Sanitarium Association without any civic assistance. The offer of Mr. Gage is for a hospital of 50 beds, and it is altogether likely, now that conditions are in such good shape, that the city of Toronto will soon have its consumptives properly looked after.

*The Victorian Order of Nurses.*

A meeting of the board of management of the Victorian Order of Nurses was recently held in Montreal and amongst others present were Lord Strathcona, who has given considerable monetary assistance to the Order, and Dr. Craik, Dr.

Stewart, and Dr. Adami, who have ever taken a deep interest in the welfare of this charity. The report of the secretary showed that during the past summer, although the staff for nursing was small, in the city of Montreal over 2000 visits had been made. Professor Bovie read the report of the work throughout the Dominion, which showed that 25 branches had been established in Canada with a staff of 30 nurses, who had attended to over 700 cases during the past year.

*Medical Banquets.*

Bishop's College, Montreal, and Trinity Medical College, Toronto, have recently held their annual banquets. At Bishop's College Dr. Wolfred Nelson of New York, who was the first student to register on the books of the College, was present and replied to the toast of "Alma Mater." At the Trinity banquet the venerable Dean, Dr. W. B. Geikie, replied to the toast of "Trinity Medical College," speaking of the good work which Trinity had performed in the medical world. 1300 students had left her doors during the 30 years of her existence, some of whom were located in all parts of the globe and many of whom were now occupying positions of prominence in the United States and in Canada. Of her present faculty all but three of the 27 were her graduates. The Dean also exhibited a copy of the first Register—a slip of paper which looked somewhat the worse for wear—and the first set of examination papers, as well as the first annual announcement of the college, which, at that time a mere card, has now attained to the respectable proportions of a handsome calendar of more than a hundred pages. Referring to the war in South Africa he said that Trinity had done nobly for Canada in that respect, as the following list attests: Dr. George Stirling Ryerson, Canadian Red Cross Commissioner; Dr. Barrie, representative of the Young Men's Christian Association; Dr. Leonard Vaux (son of the President of the Provincial Board of Health of Ontario); Dr. Lea, Dr. Worthington, Dr. Brennan (who had been Mr. Kruger's physician until hostilities broke out and who immediately joined the British army), Dr. Farrell, and Dr. Irving, and Mr. Archie Anderson, Mr. W. J. Macdonald, and Mr. W. T. Robertson (students), as well as Lieutenant Temple, son of Dr. Temple, professor of obstetrics and gynæcology in Trinity Medical College. In addition there was Dr. H. Roberts of Sheffield, England, a graduate of 1896. Trinity, the Dean thought, could well afford to be proud of her contribution to the war.

*National Sanitarium Association.*

The annual meeting of this association was held in Toronto on Nov. 3rd, and in the absence of the President, Lord Strathcona, Sir William R. Meredith, Chief Justice of Ontario and Vice-President of the association, presided. The third annual report was presented, which showed the work done at the Muskoka Cottage Sanitarium for the past year. It is now three years since this institution was opened and the yearly results have been of the most gratifying character. During the three years 371 patients have been received, 47 of whom are still under treatment. The number discharged, apparently cured, has been 57; with marked improvement, 78. The average stay of each patient has increased each year, and this year has increased to 129 days. At the beginning of the past hospital year, on Oct. 1st, 1899, there were 48 patients remaining, and during the year 141 more have been admitted, making a total on the books of 189.

*Toronto Clinical Society.*

At the monthly meeting of this society, held on Nov. 14th, Dr. Graham Chambers showed an interesting case of Alopecia Universalis in a young woman, aged 20 years, exhibiting total absence of any hairs whatever, except two on the anterior portion of the scalp. The same condition had occurred when she was five years of age, but she recovered at that time. Two years ago she had suffered from interstitial keratitis.—Dr. George A. Peters exhibited interesting specimens from a Hydatid Cyst of the Pancreas which he had removed from a young man from the Argentine Republic. A tumour could be felt below the left ribs midway between the nipple and sternal lines. It was diagnosed as being connected with the pancreas, as resonance was easily determined between the tumour and other organs, such as the left lobe of the liver, the kidney, and the spleen. Dr. Peters said that there was no doubt of its being connected with the tail of the pancreas. The patient had had indefinite pains in the region of the stomach for two or three years with subsequent removal of the appendix vermiformis. Hooklets obtained from the fluid were shown under the microscope. A few weeks before the operation was performed the cyst had been tapped and 20 ounces of fluid had been extracted of a specific gravity of 1013. The operation was performed from behind through an incision three inches in length along the erector spinæ. A search of the literature so far by Dr. Peters reveals no other reported case of hydatid cyst of the pancreas.

Toronto, Nov. 20th.

## NEW YORK.

(FROM OUR OWN CORRESPONDENT.)

*Work of the Life Savers.*

THE general superintendent of the Life Saving Service in the United States reports that at the close of the fiscal year the establishment embraced 269 stations, 194 being on the Atlantic, 58 on the lakes, 16 on the Pacific, and one at the Falls of the Ohio. The number of disasters to documented vessels within the field of operations of the service during the year was 364. There were on board these vessels 2650 persons, of whom 2602 were saved and 48 were lost. 673 persons shipwrecked received succour at the stations, to whom 1447 days' relief in the aggregate were afforded. In addition to the foregoing there were during the year 329 casualties to small craft, such as small yachts, sailboats, rowboats, &c., on board of which were 781 persons, of whom five were lost. Besides the number of persons saved from vessels of all kinds there were 595 others rescued, who had fallen from wharves, piers, and other positions of extreme peril, many of whom would have perished without the aid of life-saving crews. 514 of these were rescued from dwelling-houses, outbuildings, and other elevated places, submerged wholly or in part by the terrible flood of the Brazos river in Texas, July 6th to 12th, 1899. The investigation made into the details of every shipwreck involving loss of life and into the conduct of the life-saving crews shows that no life was lost through lack of prompt and faithful efforts on the part of life-saving men. More than half of those who perished were lost by reason of their unwise attempts to reach the shore in their own boats instead of remaining on the wrecks. The general superintendent calls attention to the justice and necessity of an increase in the compensation of district superintendents, who, he believes, are the most poorly paid servants of the Government, considering the nature and extent of their duties and their heavy financial responsibilities, and he makes a strong plea in their behalf.

*Gunshot Wounds in 1898–1899.*

The Surgeon-General of the United States Army in his annual report reviews the results of gunshot wounds during the war with Spain. Of the 4919 men injured by gunshot during the years 1898 and 1899, 586 were killed and 4333 were wounded and received into the field and other hospitals. The killed constituted 11·9 per cent. of those struck and the wounded 88·1 per cent. In other words, one man was killed for every 7·4 wounded. The Mauser bullet must therefore be regarded as less deadly than the larger missile used during the Civil War. In percentages the casualties were: killed, 17·97; wounded, 83 03; or one man killed to every 4·56 wounded. The relative proportion of killed was therefore considerably larger during the Civil War than during our recent experiences. It is to be noted also that many of the wounds of the past two years were made by missiles of larger calibre. Of those reported in 1899, 471 were especially stated as having been caused by the Remington bullet of calibre 0·45. It is safe to say that had the whole number of wounds received been inflicted by the smaller Mauser or Krag-Jorgensen bullet the percentage of immediately fatal wounds would have been materially lessened. The character of the injuries inflicted by the modern bullet is manifested also when we exclude the killed and regard only those wounds which came under the care of the surgeons. Of these during the two years there were 4333, and 259 of the patients, or 6 per cent. of the whole number, died. The corresponding percentage from the records of the Civil War was 14·3. The marked reduction of the ratio of killed to wounded may be placed to the credit of the small-calibre bullet, but due credit must be given to the improved surgical methods of the present day. Wounds of any region of the body may be taken in comparison and

the result will always be found to show a decided lessening in the percentage of cases ending fatally among those of the past two years as compared with those of the Civil War. Take, for instance, gunshot wounds of the femur. Of 6576 fractures of the femur during that war, 2923 cases were treated by primary amputation, 186 by resection, and the remaining 3467 by conservative or expectant measures. The limb was promptly amputated in 44·4 per cent. of the gunshot fractures. On the other hand, during the past two years 82 cases of gunshot fracture of the femur were reported, six of which were treated by primary amputation and two by resection, the remaining 74 cases being treated by conservative methods, not because the conditions were not favourable for the performance of primary operations, but because of the conviction that under present methods of treatment the limb could be preserved without adding materially to the danger of life. The limb was lost through surgical intervention in only 7·3 per cent. of the cases. Not only limbs but lives were saved by the surgical practice of the past two years. The mortality varied from 4·3 per cent. of cases in which the lower third was fractured to 15·6 per cent. of the cases in which the upper third was the site of the injury, whereas the corresponding percentages of fatal cases during the Civil War were respectively 42·8 and 49·7. The whole of the lessened mortality in these serious fractures may be credited to the protection given to the wound by the first-aid dressing and to the care exercised in the subsequent aseptic treatment of the fractured limb. In penetrating wounds of the thorax the rate of mortality fell from 62·6 per cent. during the Civil War to 27·8 per cent. during the years 1898 and 1899. During the Civil War there were 3475 penetrating wounds of the abdomen in which the ultimate results were determined; 3031 of these, or 87·2 per cent. of the total, proved fatal. During the years 1898 and 1899 116 cases, 81 of which were fatal, were recorded, the fatal cases constituting 70 per cent. of the total. Of 10 cases in which laparotomy was performed 9 were fatal. The alteration in the percentages of mortality in fractures of the cranium is less marked than in wounds of other parts of the body. Of 4243 cases of cranial fracture during the Civil War 2514, or 59·2 per cent., were fatal. In 1898 and 1899 68 cases were recorded with 37 deaths, the latter forming 54·4 per cent. of the whole number.

*The Insane of Cuba.*

The population of Cuba is 1,500,000, and the number of insane in custody is 424, making the proportion of insane to population three to every 10,000 inhabitants. The Secretary of State is the chief supervising officer, but there is a board of management consisting of six members. A medical director is the chief executive officer of the asylum. He states that the equipment is in every way defective and will have to be changed. Everything accomplished in the United States and Europe by modern science in the hospitals and institutions for the insane is quite unknown in Cuba. Every rule of hygiene is defective or completely lacking and this constitutes a source of danger which should be overcome at once, and in addition to this most of the buildings are on the point of tumbling down. There seems to have been no effort made thus far to classify the insane and no separation has been possible between the quiet and violent, and the several social classes are all mixed together. But an effort is now being made to better the existing conditions and the United States is asked for an appropriation for the improvement of the hospital.

*The Cost of Crime.*

It appears from the studies of the Secretary of the Prison Association that in New York City during 1899 items wholly due to crime cost the Public Treasury nearly $13,000 000 and items partly due to crime $8 000,000, a rate of about $6 per capita of the population. The per capita cost in San Francisco was about $5; in other cities it was from $3 to $3.50. In rural districts a conservative estimate would be about $1 per capita. The total cost of crime in the United States is estimated at $150,000,000 for cities and counties and $50 000,000 for States and the nation. These figures, uncertain as they may be, prove that crime is by far the largest factor with which political economy has to deal. The only other item of expense which comes near it is the maintenance of public schools, which for the same year aggregated about $139,000 000. But the enormous expenditure mentioned above is only for the prevention of crime; no possible statistics can be compiled to give an estimate of the cost of property stolen and the suffering caused by crime. $1600 per year is a conservative estimate of the amount of money stolen by the average habitual criminal. There are at present 100,000 prisoners in confinement, of whom from 40 to 50 per cent. are habituals, but this does not represent the cost of drunkenness or the cost of crime which is never detected. The total of all items of expense chargeable to crime amounts to $600,000,000 per year, which exceeds the value of the wheat or cotton crop.

*A New Emergency Ration.*

Official tests are being made of the value of three different emergency rations; these tests are made by a board of army officers appointed for the purpose. Two of these rations are proposed by manufacturers and the board has offered one of its own. The latter consists of three cakes of meat and cereal compound and two cakes of sweetened chocolate. The total weight of these concomitants is 16 ounces, besides three-fourths of an ounce of salt and one gramme of red pepper; of the other ingredients the chocolate weighs four ounces and the meat and cereal in combination respectively four and eight ounces. A flask-shaped can contains the ration and this is hermetically sealed; its edges are rounded, and it is six and a quarter inches long. A key accompanies the can by which it may be opened. The plan is that this ration shall be part of the regular outfit of the soldier in field service, and the important point to be settled is whether it contains sufficient quality and quantity and will not sicken when it is the sole dependence. A trial has been made in a long march and at the end of this test it was found that no soldier had lost flesh. The march was across the Indian reservations of several of the western tribes, and though it seemed rather hard for the men to get accustomed to it at first they grew to enjoy the ration.

Nov. 18th.

# Obituary.

## THOMAS FREDERICK HALE, M.R.C.S. ENG., L.S.A.

MR. THOMAS HALE of Barrow Hill, Chesterfield, Derbyshire, died at his residence there on Nov. 4th, in his seventy-fourth year, after a long illness. On Feb. 17th, 1898, he was seized with symptoms of cerebral hæmorrhage followed by right hemiplegia. His speech was slightly impaired, but his faculties were as clear as usual. During the whole of his illness he never left his bed. Mr. Hale was the son of the late Mr. Thomas Hampton Hale, a surgeon at Petworth, Sussex. He received his medical education at Guy's Hospital and took the diplomas of M.R.C.S. Eng. and L.S.A. in 1853. He at first practised in South Wales, but in 1859, through the late Mr. Richard Barrow, at that time owner of what is now the Staveley Coal and Iron Company, he moved to Barrow Hill and became surgeon to that company, an appointment which he held until his death. He was also surgeon to the Midland Railway Company and to various societies. Below the medium height, somewhat portly, with a strikingly handsome face, a pleasing smile, an urbane manner, hospitable and courteous, he was much sought after socially. He was exceedingly fond of music and possessed a rich clear tenor voice. Warm-hearted and generous, a loving husband and father, and a kind friend to the poor, he has left in the hearts of those who knew him a memory that time will not easily efface. Mr. Hale is survived by his widow, four sons, and four daughters.

THE LATE PROFESSOR A. W. HUGHES.—At a largely attended meeting of members of the medical profession held in Cardiff on Nov. 24th it was decided to raise a fund for the endowment of an anatomical museum in the medical school of University College, Cardiff, and also that a medal should be awarded annually in the medical school as a memorial to the late Professor A. W. Hughes. About £360 were promised for the purpose. At a meeting of townspeople held in Cardiff on Nov. 30th it was decided to support the fund being raised to perpetuate the memory of the late Professor Hughes. It was stated that a sum of £1500 would be required for the purpose and several donations were promised, including £50 from Lord Tredegar.

# THE GENERAL COUNCIL OF MEDICAL EDUCATION AND REGISTRATION.

THE Council resumed its sittings on Thursday, Nov. 29th.

The most important business (in some ways) of the Session occurred on that day, when Dr. Henry Ward Irvine, consulting physician to the Birmingham Consultative Medical and Surgical Institution, was summoned, at the instance of the medical staffs of the General Hospital and Queen's Hospital in Birmingham, to answer a charge of professional misconduct in allowing his name to appear in sundry advertisements. Dr. A. G. Bateman, for the Medical Defence Union, formulated the charge against Dr. Irvine. The charge was proved to the satisfaction of the Council, who gave Dr. Irvine until the session of next May to reconsider his position.

The Council, on Friday, Nov. 30th, received from the Pharmacopœia Committee the completed draft of the Indian and Colonial Addendum to the British Pharmacopœia. For this work the Pharmacopœia Committee is largely indebted to the late Professor D. J. Leech, Dr. Tirard, Mr. W. Kirkby, Mr. E. Morrell Holmes, and especially to Professor John Attfield, who has given 14 years of loving servitude to the completion of the British Pharmacopœia. The whole profession will endorse the special vote of thanks awarded by the Council to Professor Attfield. The text of the Addendum which has been sent to us will be reviewed next week.

On Tuesday, Dec. 4th, there was resumed the debate, adjourned from May 31st, 1900, on the position of the Royal College of Physicians of London and the Royal College of Surgeons of England in the face of the report of the Education Committee of the General Medical Council upon preliminary scientific education. The contest between the Colleges will not, we hope, go much further. The Council has shown an unmistakeable intention to stand by its position and, in spite of the able pleas of Sir Dyce Duckworth and Mr. Bryant on behalf of their respective corporations, we think the Council is right to expect deference. But what will the Council do if it does not get deference? If it proceeds to law who will pay the bill? Every possible chance of peaceful solution of the difficulty must be tried.

On Wednesday, Dec. 5th, the Council was sitting *in camerâ* for some time. The public proceedings commenced with a debate upon the examination of the Apothecaries' Hall of Ireland. Mr. Tichborne pleaded for certain omissions in the report on the inspection of the October examinations, but Sir Dyce Duckworth, speaking as chairman of the Examination Committee, argued, and carried the Council with him, that the report should be printed in its entirety. In the course of the debate Dr. McVail raised an interesting point of law. Mr. Tichborne was claiming for the Society of Apothecaries of Ireland certain privileges under an ancient Act of Parliament when Dr. McVail asked, on a point of order, whether the Council had anything whatever to do with statutes enacted previously to 1858. Mr. Muir Mackenzie will advise the Council before next session upon this matter, which may at any moment become one of considerable importance.

On Wednesday, also, there were presented the report of the proceedings of the whole Council in committee on the regulations for diplomas in Public Health; reports by the Education Committee on the steps taken for raising the standard of preliminary education and on certain applications from America for the recognition of an Arts course; a report by the Medical Aid Association Committee; and a report by the Special Finance Committee. The gist of these reports will be published in THE LANCET next week.

A quiet and business-like session was brought to a close on Wednesday evening with a cordial vote of thanks to the President.

THURSDAY, NOV. 29TH.

THE Council met to-day with a full attendance of its members, Sir WILLIAM TURNER, the President, being in the chair.

*Birmingham Consultative Medical and Surgical Institution: The Case of Dr. Henry Ward Irvine.*

The entire sitting was occupied with the consideration of the case of Dr. Henry Ward Irvine, registered as M.B., Bac. Surg. 1895, M.D. 1897, Univ. Dubl. Dr. Irvine had been summoned to answer the following charge as formulated by the Council's solicitor, namely:—

That he accepted the office of consulting physician to the Consultative Medical and Surgical Institution, Birmingham, at a salary, and approved or acquiesced in the extensive advertisements issued by that institution by posters exhibited in the various manufactories, trading establishments, and mercantile offices of the city, by advertisements in the daily press, and by lithographed letters and printed pamphlets, widely circulated, setting forth conspicuously his name and medical qualifications, and referring to his special ability as a general consulting practitioner, and soliciting and inviting the public to consult him at a reduced fee. The complainant is Robert Saundby, of 140a, Great Charles-street, Birmingham, registered as Lic. R. Coll. Phys. Edin., 1874, M.B., Mast. Surg. 1874, Univ. Edin., Mem. R. Coll. Surg. Eng. 1874. The Medical Defence Union have intimated that they are instructed to take up and conduct the case on behalf of the complainant.

Dr. IRVINE attended with Mr. FREEMAN, Q.C., to conduct his case and Dr. Bateman represented the Medical Defence Union.

Mr. WINTERBOTHAM, the new solicitor to the Council, read the notice which had been given to Dr. Irvine.

Dr. BATEMAN said that the case was a most important one, as upon the decision would depend the question whether systematic advertising and touting for patients in the case of so-called charitable institutions would or would not be authorised by the highest authority of the medical profession. On the one side they had Dr. Irvine and certain leading business men in Birmingham and on the other Dr. Saundby representing the staffs of the Queen's and General Hospitals and the medical profession generally in the city of Birmingham. In the medical profession there was objection to advertising as there was in the legal profession and on the Stock Exchange, and in May, 1899, the General Medical Council passed unanimously this resolution, viz.:—

That the Council strongly disapproves of medical practitioners associating themselves with medical aid associations which systematically practise canvassing and advertising for the purpose of procuring patients.

He admitted that this resolution was directed against a particular class of medical aid associations, but he would submit that the Consultative Medical and Surgical Institution of Birmingham came under the description of a medical aid association, although the fees charged were higher than those of the ordinary grade of medical aid associations. In 1898 Mr. Arthur Chamberlain intimated to the Hospital Saturday Fund Committee of Birmingham that he had devised a scheme for the establishment of this new institution and he invited the opinion of the committee upon it. His proposals were that an institution should be established with a small governing body, that suitable rooms should be taken in the centre of the city, that a properly qualified consulting physician and a properly qualified consulting surgeon should be employed with a salary each commencing at £500 a year, and that there should be a uniform fee of half a guinea, the fee going to the institution. This scheme was adopted. Dr. Irvine had been employed as consulting physician and the institution had been set in operation. The subject was discussed at a meeting of consultants in Birmingham and a conference took place between representatives of the medical profession and the Lord Mayor and others. The consultants offered to accept a fee of half a guinea in all cases where the patient was unable to pay the usual fee. In this way they were prepared to meet the alleged want in the city, but

this offer was not accepted and the negotiations came to nothing. In the month of November advertisements were published in the lay papers which he frankly admitted did not contain the name of Dr. Irvine. A pamphlet was circulated in the manufactories, trading establishments, and mercantile offices in the city. Of this pamphlet and other advertisements he presented copies to the Council. He also presented a copy of a card on which the following was printed: "The Consultative Medical and Surgical Institution, Birmingham. Objects: To lessen the strain upon hospital charity by providing on terms within and under conditions suitable to their pecuniary means and position medical and surgical aid to those who would otherwise seek it gratuitously or be unduly taxed by paying the usual consultative fees." He further presented two depositions to the effect that this card was exhibited in the dining-room and bar of a restaurant and in a hairdresser's shop. It would probably be argued that this institution was carried on on the same lines as a hospital, but such was far from being the case. There was no hospital consulting physician or surgeon who received a salary or for whose services a fee was charged. This institution was in course of being registered under the Companies' Act as a company carried on not for profit. It was regarded by its originators not as a charity but as a place where a man could claim medical aid as of right and it was conducted on purely business principles. Had Dr. Irvine, apart from this institution, allowed his name, address, qualifications, hours of consultation, and fees to be advertised by these bills, posters, pamphlets, and newspaper paragraphs there could have been no question about his conduct being "infamous conduct in a professional respect," and the fact that this advertising was done under the ægis of this institution managed by laymen did not, in his opinion, alter the gravity of the professional offence and could not be held to excuse or to palliate such conduct.

Mr. FREEMAN, opening the case for Dr. Irvine, took exception to the two depositions handed in by Dr. Bateman on the ground that his client had received no notice of them and therefore had had no opportunity of bringing rebutting evidence.

Mr. MUIR MACKENZIE, legal adviser of the Council, said there was practically nothing new in them.

Mr. FREEMAN pointed out that the depositions said that the cards were seen in particular premises, indicating that there had been systematic advertising, which he entirely denied. Unless the documents were withdrawn he would apply for an adjournment of the case.

After conferring in private for a time the Council decided not to receive the depositions.

Mr. FREEMAN, continuing his speech, said that this institution had been set on foot by public-spirited citizens with no view whatever to their own profit. It was a philanthropic institution between which and a medical aid association there was the widest possible distinction. It was a development of the work of the Hospital Saturday Fund just as the convalescent homes at Llandudno were a development of that work. The feeling had grown up that there was a gap in Birmingham between the hospitals and the consulting physicians and this institution was designed to fill the gap. There had been many people who went to the hospitals and obtained free medical aid who ought not to have done so, being able to pay. That was the state of things on the one hand, while on the other the fees charged by the ordinary consultants were too high for many of these people. The founder of the institution, Mr. Arthur Chamberlain, would be called and would say that it was purely and absolutely a philanthropic institution and that there was no thought of its putting money into the pockets of anybody connected with it. The funds for it, indeed, had had to be provided by private charity. Unfortunately, the committee had not been able to carry with them the bulk of the medical profession. It might be that the institution was considered an invasion of the domain of the medical profession. The thing certainly was a novelty and they knew that there were professions which did not always like novelties. But the charge which the Council had to consider was a charge not against the institution but against Dr. Irvine. When the scheme had been matured the committee advertised for a consulting physician. They received applications from medical men in all parts of the United Kingdom and after due consideration Dr. Irvine was engaged at a salary of £500 a year. As for the so-called advertising, all that was done was to announce to the customers of the Hospital Saturday Fund, the working men who subscribed to that fund, that the institution was ready to commence operations. The committee sent out these cards and pamphlets to the various firms by whom the workmen were employed who had previously subscribed to the fund. This was not advertising, and indeed it was only what was done when an ordinary hospital was opened: people received notice that the boon was at their command. It was quite conceivable that these documents found their way into places where it was not intended they should be, but no blame for that could attach either to Dr. Irvine or the committee. If what had been done here were regarded as advertising the Council would be opening a very wide door indeed. Every hydropathic in the country would be an offender, for every hydropathic announced that it had a resident physician and gave his name, and many hospitals advertised the names of their staff. So far from this institution being a source of profit he might say that for every half-guinea earned 30*s.* had been expended.

Mr. WILLIAM COOK, alderman of the city of Birmingham and chairman of the committee of the Hospital Saturday Fund, was then examined by Mr. Freeman and in the course of his evidence he gave an account of the work of the fund. Mr. Chamberlain's scheme, he said, was unanimously adopted by the large meeting to which it was submitted, and when the scheme had been worked out, notices with regard to it were sent out to the subscribers to the fund in the usual way. Owners of factories and workshops were, as usual, requested to post the notices in their premises. Dr. Irvine was not consulted as to the issue of the notices. There was no thought of any one being pecuniarily benefited by the institution and up to the present time the committee had lost money by it.

In cross-examinaton by Dr. BATEMAN witness said that he did not, and could not, regard the notices as advertisements, they were simply announcements. No doubt the more patients they had the less money would require to be subscribed. If Dr. Irvine was found to be worth more than £500 a year and they had the funds to pay it he supposed the committee would like to see him properly paid. His hope was that in time the institution would become self-supporting.

By Sir WILLIAM THOMSON: As the institution developed, and he believed it would develop, they might appoint not only a consulting surgeon but also another consulting physician.

By Sir JOHN BATTY TUKE: Their idea was that when they could afford it they would have other specialists at the institution.

By Mr. HORSLEY: Part of the money for the institution was being obtained from the Hospital Saturday Fund. If the institution became self-supporting it would still be part of a philanthropic institution—namely, the Hospital Saturday Fund.

Mr. W. S. ASTON, honorary secretary of the Hospital Saturday Fund and of the institution, was next examined. He characterised the notices sent out as announcements pure and simple.

By the PRESIDENT: Persons of the class contemplated in the scheme of the institution were admitted to its benefits though they might not be subscribers to the Hospital Saturday Fund, but these benefits were designed primarily for subscribers.

Cross-examined by Dr. BATEMAN witness said that it was quite well known in Birmingham what class of people were intended to make use of the institution. The practice was for Dr. Irvine to take the individual fees and account for them collectively to him.

By Sir CHRISTOPHER NIXON: The committee had seen the register kept by Dr. Irvine and they were convinced that there had been no abuse of the institution.

By Dr. WINDLE: Over 2000 cards were sent out to the firms whose workpeople subscribed to the Hospital Saturday Fund. There were hairdressers and restaurant keepers who subscribed, and they, like the rest, would receive cards. Though there had been no withdrawing of the notices they had not felt that there was any need to repeat the issue of them; the notices, indeed, had served their purpose.

Mr. ARTHUR CHAMBERLAIN, Justice of the Peace, Birmingham, was next examined. In answer to Mr. FREEMAN he said that the question had been asked, Was this Consultative Medical and Surgical Institution of Birmingham a charity? He wished to say that it was a philanthropic institution which at the present moment was

not self-supporting but which the managers of it hoped to see become self-supporting. He certainly should not like it called a charity because one of the objects the management had in view was the preservation of the self-respect of persons who ought not to seek aid from a hospital, but were yet in need of some higher advice than they could get from their street doctor. It was ridiculous to suggest that the gentlemen who had founded the institution were in any way pecuniarily interested in it or had any thought of making money out of it. He himself had subscribed £200 to the fund. They wished to have a medical man who could be consulted in preference to the ordinary or general practitioner who had to attend workmen, school teachers, and others, and the managers had found that the class of people who came to consult Dr. Irvine were of the class for whom the institution was originated. Everyone of them belonged to the class of persons who would have sought gratuitous advice or ought to have sought gratuitous advice, they being unable to pay the usual fee of consulting physicians. Birmingham people were not mean and they would not go to an institution like this in question to save something on the fee if they were really able to pay, and the tendency that the institution would create would be that of causing patients to go to the men who charged the higher fee, because they believed that after all they would get from these men the best value for their money. The managers of the institution believed they were creating a class of persons who would follow Dr. Irvine into private practice or go to some other consulting physician if it was inconvenient to consult Dr. Irvine in private practice. There was no hostility whatever to the medical profession of Birmingham, and he thought that the profession would agree with the managers that something of the kind of this institution was needed for the people of the town. It had been suggested that the objects of the institution were non-medical. That suggestion simply represented the state of prejudice into which certain objectors had worked themselves. Any profits obtained would be applied to the development of the institution. Any notices which had been sent out were only of the kind sent out by similar institutions. What had been put into the newspapers was a notice which he should call an advertisement. From that, however, the name of the doctor had been omitted, and he was quite sure that if a general hospital was established in Birmingham the directors would publish an advertisement in much the same terms as the notice sent out by the managers of this institution. Asked if it was not intended to send out notices the witness replied that it was not intended to advertise.

Replying to the PRESIDENT, Mr. CHAMBERLAIN said that the institution had no printed regulations beyond those which were already before the Council and which set forth the rules, aims, and objects of the institution.

In cross-examination by Dr. BATEMAN the witness declared that he did not think the managers would send out notices in the event of a consulting surgeon being appointed for the institution.

Then it would be harder on him than on the consulting physician?—You are making fun now.

What difference do you make between Dr. Irvine and a "street doctor?"—I would say that it consisted in his being an M.D. Having that degree he is properly a doctor.

He is not a member of any college of physicians?—I think he holds the right to that title, but you had better ask him.

In view of endeavours being made to prejudice the public against Dr. Irvine witness thought the managers were right in telling the public what qualifications their doctor possessed.

By Mr. HORSLEY: The women's hospital in Birmingham was not a business concern but a charity. Dr. Irvine had not had surgical cases brought before him.

Then the institution is only for medical cases?—The work of the institution is restricted.

In examination by Dr. GLOVER witness said he was quite satisfied that they were not misleading the public by their announcements in respect to the institution. The patients, whether men or women, could take care of themselves. They might come once to Dr. Irvine, but witness thought they would not come twice. The whole reason for the existence of the institution was the preservation of the self-respect of the patients. If the Council told him that in anything which had been done the managers of the institution had gone against the principles of the profession they could reconsider their position. But they did not consider that they had done that. Representing the managers, he came before the Council to say what they thought right and what they thought wrong.

Dr. HENRY WARD IRVINE, the practitioner complained of, was thereupon called. In answer to Mr. Freeman he said that he had satisfied himself that the Birmingham Consultative Medical and Surgical Institution was a philanthropic institution, the promotors of which received from it no gain whatever. He had taken special pains to make sure that that was so. He was not consulted in any way about the advertisements, but he believed that in one of the advertisements his name did not appear at all. He had never seen the posters anywhere.

Was there anything in the nature of general or systematic advertising?—Certainly not. Nothing was done more than was usual at the opening of such institutions. In Dublin they had a similar procedure to that followed in Birmingham and there there were placards issued which contained the names of the doctors and staff.

So far as you are aware have you lent yourself to systematic advertising?—Certainly not.

Until you received notice from the Council had you any idea that you were doing anything wrong?—Certainly not.

In answer to further questions witness mentioned that after receiving the notice from the Registrar of the Council he had consulted with practitioners in Birmingham who had told him they thought he would hear nothing more about the matter. There was no rule about dealing with any special class of people, but so far as he was aware those who came to him were of the class of people to whom Mr. Chamberlain referred. All cases he had to do with were entered by him in the "Case-book." He was referred to as "consulting physician," but the phrase was not his. However, it denoted nothing.

Dr. BATEMAN asked to see the agreement which Dr. Irvine had with the managers of the institution.

Mr. FREEMAN showed him a copy of it.

Dr. BATEMAN wanted to know if Dr. Irvine had read the annual report of the institution.

The WITNESS replied that he did not know that he had.

Dr. BATEMAN reminded Dr. Irvine that it was said that a large number of advertisements had appeared. Had it never struck witness to inquire whether his name was connected with these advertisements, or might the Council take it that Dr. Irvine, as he had said, had never seen one of the objectionable placards?

The WITNESS: I never saw one.

Dr. BATEMAN: Is there not one in the institute?

The WITNESS: Oh, yes.

You consider that there is nothing in the title of consulting physician?—Nothing.

Do you deal with both surgical and medical cases?—With medical. I have refused surgical cases. I have no record of the number I have refused. Perhaps they would amount to a dozen.

Mr. FREEMAN, at this stage of the inquiry, informed the Council that the agreement with Dr. Irvine showed that it was made on Feb. 28th, 1900. It employed Dr. Irvine for one year certain and he was not to carry on any separate practice.

Dr. BATEMAN: And he is bound over not to practise in the neighbourhood.

Mr. FREEMAN: He is to devote the whole of his time and attention to the duties of his office.

Dr. BATEMAN: Did you see people at their own homes?

The WITNESS: Yes, some.

Dr. BATEMAN: You give your services entirely to the institute and you are not permitted to practise outside; do you think that that is consistent with the etiquette of the profession?

The WITNESS: I do think so.

Replying to Mr. HORSLEY, who asked if the persons who came before him were what they represented themselves to be, the WITNESS said: Well, of course, my answer is that I ask their names and occupations.

Then the institution is precisely in the same position as many of our charities?—It is much the same as the hospitals in Birmingham.

By Sir DYCE DUCKWORTH: Sometimes the persons had a letter—a hospital letter. He wrote prescriptions which those who came to consult took away. Persons who came to consult him in some cases visited two or three times. Each visit paid to him was a consultative visit.

How does that practice differ from the practice of an

ordinary medical man?—I think all medical men have to see patients alone.

Dr. GLOVER: Do you get half a guinea for each time the people come?

The WITNESS: Unless the people are destitute.

By the PRESIDENT: A patient pays half a guinea whether he is seen at his own home or at the hospital.

Dr. WINDLE: Have you suggested to the secretary at any time that the cards with your name on them should be withdrawn?

The WITNESS: No, I have not.

Mr. MUIR MACKENZIE said that he saw that in the report the consulting fees given amounted to £116. That worked out to 222 persons at half a guinea each. Did that mean that Dr. Irvine saw 222 persons?

The WITNESS: No; some names are repeated—some names appear several times. There are not 222 different names.

Then it ought to be 222 consultations?—That would be more accurate.

The PRESIDENT: You can now retire, Dr. Irvine. Do you think it necessary, Dr. Bateman, to make any reply?

Dr. BATEMAN: Certainly not.

The PRESIDENT: Then the case is closed and parties will withdraw.

The Council deliberated in private. On parties being recalled,

The PRESIDENT, addressing Dr. Irvine, said: The Council have given consideration to your case and I have to tell you that they consider the charge you were required to answer has been proved, but that the further consideration of your case has been adjourned until the session in May next. You will then get notice to appear; due notice will be given to you. But the Council regard the conduct complained of as being of a serious character and in adjourning your case they give you an opportunity to reconsider your position. That is the deliverance of the Council.

Dr. IRVINE: Thank you, sir.

The Council adjourned.

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FRIDAY, NOV. 30TH.

The Council resumed its session to-day, Sir WILLIAM TURNER being in the chair.

*The Case of Dr. William Allen.*

The Council at once proceeded to the consideration of the case of William Allen, of Shotley Bridge, co. Durham, registered as M.D., Mast. Surg. 1877, Q. Univ. Irel., who had been summoned to appear before the Council to answer the following charge, as formulated by the Council's solicitor:—

That, being a registered medical practitioner, he on two occasions gave and signed certificates of death of persons on whom he had not only not attended professionally, but who had been to his knowledge attended and medically treated by an unqualified person named Burke, who was, to his knowledge, attending and treating patients and otherwise acting as though he had been a duly qualified medical practitioner.

The names of the persons whose deaths were so certified are Emma Jane McCue and Hannah Margaret Longstaff.

Mr. Atherley Jones, Q.C., M.P., appeared on behalf of Dr. Allen.

Mr. WINTERBOTHAM, solicitor of the Council, explained that in this case there was no complainant before the Council and it therefore became his duty to state shortly the facts of the case and to call the attention of the Council to the documents which were in evidence. The attention of the Council was called to the matter by the fact that there was an inquiry held by a Local Government Board inspector on June 4th last into certain charges which had been made against Dr. Allen as medical officer of health. This inquiry was very fully reported and the charges then made against Dr. Allen were stated in the documents before the Council. At the inquiry evidence was given with regard to the certificates of death mentioned in the charge and the attention of the Council had been called to this evidence. The first and important question was whether Mr. Burke, who was undoubtedly and admittedly an unqualified man, was really covered or employed by Dr. Allen. At the inquiry Dr. Allen stated that Mr. Burke was in effect Dr. Renton's assistant and that therefore he (Dr. Allen) was in no way responsible for him. There was an agreement between Dr. Renton and Dr. Allen that the latter was to have the entire management and to pay all the expenses of the practice and that after making certain allowances he was to receive three-fourths of the net profits of the practice. In such circumstances he hardly saw how Dr. Allen could put upon Dr. Renton the responsibility for the employment of Mr. Burke. With regard to the case of Emma Jane McCue there was the evidence of the husband to the effect that his wife had been attended by Mr. Burke and that Dr. Allen filled up the cause of death. In the case of Hannah Margaret Longstaff there was the evidence of the husband that Dr. Allen had never been in his house and had never seen his wife.

Mr. ATHERLEY JONES, opening the case for Dr. Allen, said that while the newspaper report from which the *précis* before the Council had been made was fairly accurate on the whole, yet it was not complete and therefore he felt under the necessity to give some account of the history of Dr. Allen's connexion with this practice. Dr. Allen was educated at the Royal University of Ireland and graduated there with first-class honours. He obtained the gold medal in 1877 and shortly after that he was appointed senior demonstrator by Professor Clelland of Glasgow, an appointment which he held for about six years and resigned owing to ill health. Thereafter Dr. Allen went as assistant to Dr. Renton at Leadgate. At that time (1884) Dr. Renton had five assistants—one each at Leadgate, Consett, Shotley Bridge, Blackhill, and Allandale; and from 1884 down to the year 1893 Dr. Allen's duties were confined to Leadgate. In the latter year a fresh arrangement was entered into whereby Dr. Allen was to reside at Shotley Bridge and take over the practice there, and was not to act elsewhere unless when specially called upon by Dr. Renton. In 1896 Dr. Renton required an assistant at Allandale. Mr. Burke was at that time studying medicine in America. Mr. Burke was married to one of Dr. Allen's sisters and at the instance of Dr. Allen's sister Dr. Renton agreed to appoint Mr. Burke to Allandale as an unqualified assistant. From 1896 until November, 1898, Mr. Burke was the unqualified assistant of Dr. Renton and subject to dismissal by him. In November, 1898, a change took place because Dr. Renton, who had been in ill health for a time, determined to retire from practice. He then invited Dr. Allen to take the control of the practice with a view of purchasing it. He accepted this invitation and went to reside at Dr. Renton's house at Blackhill. The other places being all filled now by qualified men there was no need for Mr. Burke, and Dr. Allen took him to act as his dispenser at Blackhill. This state of things continued from November, 1898, until March, 1899. On behalf of Dr. Allen he submitted that he was in no way responsible for Mr. Burke at the time when these certificates were given. Indeed, Dr. Allen had nothing whatever to do with Allandale, where the deaths occurred. He was sent for in these cases merely because he was the nearest medical man, and he received no payment whatever for his services. In the Longstaff case Dr. Allen had seen the patient three months before her death, and from what he saw then and the information conveyed to him by Mr. Burke he was satisfied as to the cause of death. There was no obligation upon Dr. Allen to give a certificate. He, however, went to the registrar and told him about the time which had elapsed since he saw the patient alive, and it was after doing this that he gave the certificate. In the McCue case Dr. Allen went to the case because he was called upon, and when he saw the patient he found her alive, and accordingly he gave a certificate. He was in no way responsible for Mr. Burke attending the case. In conclusion, counsel assured the Council that his client had no thought of, or wish to, defy their regulations or to do anything inconsistent with the honourable conduct of his profession. If, perhaps, he had been a little indulgent towards Mr. Burke it was in order to provide him with the means of living.

Dr. ALLEN gave evidence in his own behalf. He bore out his counsel's statement and supplemented it. He said that once or twice he had given money to Mr. Burke for Dr. Renton and receipts for the same had been sent to Dr. Renton by post. When Dr. Renton went to Africa for his health witness took possession of his residence. That was at the beginning of November, 1898, and it was in contemplation at the time that the witness should acquire the whole of Dr. Renton's practice by purchase. There was no truth in the allegation that he took possession of Dr. Renton's residence in order to secure the several public or semi-public appointments as medical officer which Dr. Renton had held. He admitted that he had taken Mr. Burke to live with him, but he denied that he looked upon Mr. Burke as an assistant of his till March, 1899. While residing at Blackhill there had been three qualified assistants in his employment. Mr. Burke had remained with him until

December, 1899. With regard to the case of Mrs. Longstaff witness stated that he had seen her professionally about three months before her death. She had heart disease at that time, but the disease was not very bad. When he visited her on being sent for on the night she died he was informed that she had been confined ten days previously and that she had gone on all right until immediately before she died when she was taken ill. When he saw her witness came to the conclusion that there had been wasting of the heart and that her death was due to that cause. He had gone to the district registrar to ask what he should do in regard to the filling-up of a certificate. The district registrar had thereupon advised him that he required a certificate which stated the cause of death, the name of the deceased, and the time of death, adding that he was bound to accept a certificate containing these particulars. Witness asked the district registrar for a certificate form and on getting one he at once filled it up, omitting, however, any mention of the time of his last visit to the deceased. It was no unusual thing for a patient to be seen long before death and for a medical man to certify the cause of the death of that patient. Witness remembered the case of a man who had died 15 months after he last saw him. That patient was suffering from heart disease, and when he died suddenly witness had written to the coroner intimating his knowledge of the man's disease, and the coroner did not hold an inquest. With regard to Mrs. McCue witness said that he had attended her on the day of her death, but only then. He was called for. The man who came for him told him that his wife was seriously ill and asked him to see her at once. He got to McCue's place in 20 minutes, a clergyman who was visiting at witness's place having driven him there in his trap. On entering McCue's house witness had seen an oldish woman standing in the kitchen. This person pointed witness to the room in which the patient was. The patient lay on a bed and she was pale and motionless. On going up to her witness could not find any wrist pulsation, but on putting his ear to her chest he found that there were pulsations of the heart. She, however, was *in extremis*—was in such an extreme condition that witness could do nothing in the way of treatment. She was lying with her head very low and she had not been delivered at the time. She died about ten minutes after he entered the room. Her death was brought on by hæmorrhage which had set in before his arrival. Witness had satisfied himself that the woman died during his presence in the room. After her decease witness had gone to the surgery at Allandale and there partly filled in a certificate. He did not know the deceased's name or age and he had asked his sister to get information as to these and have the certificate completed. It was false to say that he kept a book of "signed certificates."

In answer to the PRESIDENT witness stated that the Local Government Board had withheld ratification of his appointment as medical officer pending the investigation of his conduct by the General Medical Council.

Mr. HORSLEY said that he wished to ask the witness three questions.

The PRESIDENT pointed out that if the case was to go further the Standing Orders that evening must be suspended so that the Council might sit beyond six o'clock.

Dr. MACALISTER moved the suspension of the Standing Orders in order to secure the completion of the examination of Dr. Allen, and also consideration of a report by the Pharmacopœia Committee.

Sir DYCE DUCKWORTH, though not opposing this motion, entered his protest against the frequency in recent sessions of the suspension of Standing Orders with the object of prolonging sittings beyond the ordinary time of rising for the day—namely, six o'clock

Standing Orders were then suspended, but only so far as to enable the Council to deal with the Pharmacopœia Committee's report, the case of Dr. Allen being adjourned till Saturday afternoon.

### *Addendum to the British Pharmacopœia.*

The Council thereupon proceeded to receive the completed draft of the Indian and Colonial Addendum to the British Pharmacopœia, 1898, regarding which the Pharmacopœia Committee submitted the following report:—

The Pharmacopœia Committee, having been intrusted with the duty of preparing the Indian and Colonial Addendum to the British Pharmacopœia, 1898, have now the honour to submit for the approval of the Council copies of the completed draft of the work. The scope of the work was indicated in the preface to the Pharmacopœia of 1898, when it was stated that in the contemplated Addendum "medicinal plants and other substances suggested for inclusion by Indian and Colonial authorities" would be dealt with more fully than was possible at the time. The principles which have been observed in its construction are the same as those which have already been adopted by the Council in the British Pharmacopœia, 1898. A brief statement of the object and plan of the Addendum is included in the preface which the committee have drawn up.

The preparation of the work has involved a large amount of correspondence with administrative, medical, and pharmaceutical authorities in many parts of the empire; and the committee desire to record their acknowledgments of the interest shown and the assistance rendered by those who have thus coöperated with them.

The committee have within the last few months held a number of special meetings for the revision and completion of successive drafts. They believe that the final proof, subject to the correction of such typographical errors, if any, as may be detected, may now be fitly adopted by the Council and approved for publication in the manner prescribed by statute. The volume is about double the size of the Additions of 1890, which was published at the price of 1*s*. The committee suggest that, in view of the expense incurred in its preparation, 3*s*. would be a suitable price for the Addendum. The power of actually fixing the price rests with the Commissioners of Her Majesty's Treasury.

To the labours of the late chairman of the committee, Dr. Leech, who continued to devote time and thought to the work up to the end of his life, and of the secretary, Dr. Tirard, the committee have been much indebted. Acknowledgments are also due to Mr. W. Kirkby of Manchester, and of the secretary, Dr. Tirard, the committee have been much indebted. Acknowledgments are also due to Mr. W. Kirkby of Manchester, and to Mr. E. Morell Holmes, for valuable advice and assistance in reference to questions of pharmaceutical botany. Dr. Attfield, editor of the British Pharmacopœia, 1898, has also edited the Addendum which is its supplement. He has for many years applied himself to the work of adapting the Pharmacopœia to the requirements of the empire at large and his task is now successfully completed. The committee accordingly suggest that a special vote of thanks for his long-continued services should be passed by the Council.

In order that the Addendum may be issued to the public before the end of the present year the committee recommend: (1) that the completed draft (subject to the correction of typographical errors, if any) be adopted by the Council as the Indian and Colonial Addendum (1900) to the British Pharmacopœia, 1898; (2) that the President and chairman of the committee be authorised to communicate with the Commissioners of the Treasury on the question of the price to be fixed for the Addendum, to arrange for its publication, and to make the proper statutory announcement thereof by notice in the *London, Edinburgh,* and *Dublin Gazettes* (Medical Act, 1862); (3) that pending formal publication the committee be empowered to distribute "advance copies" to the medical and pharmaceutical journals and to arrange that copies may be placed for the inspection of the public in the Council's offices in London, Edinburgh, and Dublin.

The committee further recommend: (4) That the thanks of the Council be conveyed to Dr. John Attfield, F.R.S., for his long-continued and valuable services as editor of the British Pharmacopœia, 1898, and of the Indian and Colonial Addendum, 1900.

Dr. MACALISTER, in submitting the foregoing report, remarked that the urgency in respect to it arose mainly from the fact that this (Friday) night was the night on which the mails went out. The addendum referred to was a supplement up to date to the new edition of the Pharmacopœia, but it had been a long time in preparation. As a matter of fact, it had been suggested so far back as 1857, and since that year the facts embodied in it had gradually been collected. A large number of experts in all divisions of the empire had given assistance in its preparation, which had been most careful. The Pharmacopœia Committee had gone over the whole work line by line, word by word, no less than three times. He (Dr. MacAlister) himself had gone over it ten times and it was impossible to say how often Dr. Attfield, the editor, had revised it, as the times he had gone over it were innumerable. The work was now one that the committee thought would be accepted by the General Medical Council. It marked a new departure as it formed the completion of the plan for a Pharmacopœia for the whole of the empire referred to in the preface of the British Pharmacopœia of 1857. It was impossible for the members of the Council to go through it and discuss it, and he hoped it would be accepted by the Council. If now accepted it was intended at once to approach the Treasury to fix the price per copy. The committee considered that that price should be 3*s*., and it was in contemplation to print as many as 10,000 copies. As to the copyright, that unfortunately extended to the United Kingdom only. He believed that it was impossible to get copyright for it in the United States of America.

Sir WILLIAM THOMSON asked if the copyright could not be extended.

Dr. MACALISTER replied that he was afraid that it could not be extended.

Mr. BROWN pointed out that if advance copies were now issued some people might prepare a synopsis of the contents.

The PRESIDENT said that the General Medical Council had got the copyright for the United Kingdom. They meant to adhere to it and they had made it known that they meant to defend it.

The first three recommendations of the committee, moved by Dr. MACALISTER and seconded by Dr. MCVAIL, were

then adopted. The fourth recommendation was also adopted, Dr. MACALISTER moving and Sir DYCE DUCKWORTH seconding.

The Council adjourned.

SATURDAY, DEC. 1ST.

The Council met again to-day, Sir WILLIAM TURNER occupying the chair.

*The Case of Dr. William Allen.*

Consideration of this case was resumed by the Council.

In answer to Mr. HORSLEY Dr. ALLEN stated that the distance from Allandale to Shotley Bridge was about two miles. Both Mrs. McCue and Mrs. Longstaff died from heart disease. He had employed Mr. Burke since March, 1899, as an assistant in the ordinary sense of the word. There, however, was no agreement. Mr. Burke had simply come to him when witness separated from Dr. Renton. For a while Mr. Burke was under witness's close supervision, but the arrangement before March, 1899, was a temporary one. Mr. Burke had simply stopped on to fill a gap. He acted as dispenser but he might have seen patients.

Replying to Sir CHRISTOPHER NIXON Dr. ALLEN said that he had no unqualified assistants and that he strictly conformed to the regulations of the General Medical Council respecting the employment of assistants. It was his sister who had suggested the employment of Mr. Burke.

By Sir WILLIAM GAIRDNER: Mr. Burke was a medical student in New York for two years. After he began to reside at Allandale he went to the Newcastle School of Medicine.

By Dr. LITTLE: Mr. Burke told witness that his instruction had included midwifery.

By Sir DYCE DUCKWORTH: Mr. Burke was entitled to earn money for Dr. Renton's firm. If he received money from patients he would pay it over. Witness did not benefit by the money that went into the firm's account.

By Dr. GLOVER: Mr. Burke had not made any report to witness about Mrs. Longstaff during the ten days between her confinement and her death. Mr. Burke had told him that everything was known. From the history of the case witness concluded that Mrs. Longstaff's case was a very tedious one, but Mr. Burke said that on the first appearance of hæmorrhage he sent for witness. As regards the case of Mrs. McCue he thought that having been called in he was entitled to give a certificate.

By Mr. MUIR MACKENZIE: He certainly was aware of the General Medical Council's regulations about "covering," but when he got the notice from the Council in respect to unqualified assistants that notice did not affect him because he had no unqualified assistants. Any money that he received from Mr. Burke previously to witness's practising on his own account was Dr. Renton's money, and he had rendered accounts to Dr. Renton in respect of it.

By the PRESIDENT: He certainly did not derive any personal gain from Mr. Burke's attendance on cases in Dr. Renton's district. He wished to state that emphatically.

Did you participate in any way in the receipts derived from those divisions of Dr. Renton's districts over which you had no supervision?—None whatever. I received nothing except for my own district.

Do you admit that you were the junior member of Dr. Renton's firm?—Certainly not. I looked upon myself as senior assistant to Dr. Renton and any moneys I received from patients were received in Dr. Renton's name.

Mr. ATHERLEY JONES, Q.C., offered to call Dr. Allen's father-in-law who, he said, was a justice of the peace and a gentleman well known in Dr. Allen's district.

The PRESIDENT, however, intimated that there was no desire to hear him.

The case was then closed and the Council deliberated upon it in private. On the re-admission of the public

The PRESIDENT announced the decision. Addressing Dr. Allen he said: The Council has considered your case with great care and these are the conclusions which the Council has come to: that the charge that you were required to meet has been proved to the satisfaction of the Council; that the further consideration of the charge proved against you has been adjourned till the session of next May; you will receive due notice when the May session is to take place and then you will have to appear; and that the Council feels it to be its duty to express its sense of the gravity of the charge and gives you this opportunity to consider fully your position as regards the direct or indirect shelter of unqualified practitioners.

*The Case of James Alexander Graydon.*

The Council then resumed the consideration, adjourned from May 24th, 1900, of the conviction, proved to the satisfaction of the Council, of James Alexander Graydon, of 21, South-grove, Bow-road, London, E., registered as Lic. Fac. Phys. Surg. Glasg. 1870, who had been summoned to appear before the Council in consequence of his conviction, as shown by the following copy of the certificate:—

In the County of London and In the Metropolitan Police District.

Before the Court of Summary Jurisdiction sitting at the Thames Police Court in the said County and District.

The Fifth day of March, One thousand nine hundred, James Alexander Graydon (hereinafter called the Defendant) is this day convicted for that he on the Fourth day of March, One thousand nine hundred, at South-grove, Mile End Old Town, in the County and District aforesaid, did unlawfully assault Henrietta Graydon, the Complainant in this behalf.

And it is adjudged that the defendant for his said offence do forfeit and pay to the clerk of this court the sum of 21*s.*

And in default of payment it is adjudged that the defendant be imprisoned in Her Majesty's prison at Wandsworth, and there kept to hard labour for the space of seven days, unless the said sum be sooner paid.

FREDK. MEAD,
One of the Magistrates of the Police-courts of the metropolis.

I hereby certify that the above is a true copy of a conviction kept amongst the records of the county of London.

RICHD. NICHOLSON,
May 3rd, 1900. Clerk of the Peace for the said county.

The PRESIDENT, addressing Mr. Graydon, said that in May he had been admonished as to his conduct during the interval of adjournment and told the kind of evidence as to his conduct which he would have to produce at this session.

Mr. GRAYDON presented three certificates of character and conduct—one from a medical practitioner, another from a clergyman, and the third from a gentleman connected with the Church Army. In reply to the PRESIDENT he said that he was no longer in practice but was associated with a branch of the Church Army.

After the Council had deliberated in private for a time the PRESIDENT announced to Mr. Graydon that the Council did not see fit to erase his name from the Register.

*The Case of Andrew Alexander.*

The Council resumed the consideration, adjourned from May 26th, 1900, of the charge proved against Andrew Alexander of Blaydon-on-Tyne, registered as Lic. R. Coll. Phys. Edin. 1885, Lic. R. Coll. Surg. Edin. 1885, Lic. Fac. Phys. Surg. Glasg. 1385, who had been summoned to appear before the Council on the following charge:—

That, being a registered medical practitioner, he covered an unqualified person named Tait, whom he employed or purported to employ as an unqualified assistant and whom he permitted and enabled to attend on and administer medical relief to patients and carry on medical practice as if he were a duly qualified practitioner.

Mr. APPLEBY, solicitor, Newcastle-upon-Tyne, appeared as the legal representative of Mr. Alexander.

The PRESIDENT said that Mr. Alexander had sent to the Council letters and other documents as to his conduct since the May session.

Mr. APPLEBY said that after the proceedings in May his client at once dismissed the assistant and since then had endeavoured to carry out the requirements of the Council to the fullest extent.

Mr. ALEXANDER, in reply to questions addressed to him by members of the Council, said that he now carried on the practice without assistance and found that he was quite able to do so, the work having diminished somewhat.

The PRESIDENT, after the usual deliberation *in camerâ*, said, addressing Mr. Alexander: The Council, having considered the further evidence which you have submitted, has decided to take no further steps in your case and that the Registrar is not directed to remove your name from the Register.

*Removal from the Dentists Register.*

The Council next dealt with the case of William Vansittart, of 4, Westbourne-grave, Bayswater, London, W., in regard to whom the Dental Committee presented the following report:—

REPORT ON THE CASE OF WILLIAM VANSITTART.

The complaint against William Vansittart having been referred to the Dental Committee to ascertain the facts the Dental Committee beg to report as follows:—

The committee find that the following facts were established by the evidence:—

1. That William Vansittart was registered in the Dentists Register on Jan. 11th, 1892, as having been in practice before July 22nd, 1878, and that his address in the Dentists Register is 4, Westbourne-grove, Bayswater, London, W.

2. That William Vansittart was on June 12th, 1900, convicted of the following misdemeanour—namely, that being a person over the age of 16 years, and having the custody, charge, or care of a child under the age of 16 years, to wit, William Vansittart, a boy of the age of 10 years, he did unlawfully and wilfully neglect the said child in a manner likely to cause him unnecessary suffering or injury to health contrary to the statute, and was thereupon ordered to be imprisoned in Her Majesty's prison at Pentonville, and there kept at hard labour for the space of three months.

: The evidence before the committee consisted of a certified copy of such conviction. WM. TURNER, Chairman.

The PRESIDENT informed the Council that Mr. Vansittart was summoned before the Dental Committee but did not appear.

The decision of the Council in the case was that Mr. Vansittart having been proved to have been convicted of a misdemeanour the Registrar be directed to erase his name from the Dentists Register.

The Council then adjourned.

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MONDAY, DEC. 3RD.

The Council resumed this afternoon, Sir WILLIAM TURNER being in the chair.

*The Case of John Martin Thomson.*

Consideration was given to the case of John Martin Thomson of Clarkston, Airdrie, registered as M.B., Mast. Surg. 1891, Univ. Edin., who had been summoned to answer the following charge, as formulated by the Council's solicitor:—

That he, being a registered medical practitioner, habitually employs as assistants for the sale of drugs and poisons persons who are not qualified to act as chemists or pharmaceutical assistants, and thereby causes such persons to commit breaches of the Pharmacy Acts.

Dr. Martin Thomson appeared together with his legal representative, Mr. T. Ernest Saunt, M.R.C.S.Eng., barrister-at-law, instructed by Messrs. Blyth, Dutton, Hartley, and Blyth, solicitors, Gresham House, London, E.C. Mr. Peter Morison, jun., of Messrs. P. Morison and Son, S.S.C., Edinburgh, appeared to represent the complainers in the case—the Pharmaceutical Society of Great Britain.

Mr. BROWN expressed the opinion that before the case was proceeded with the Council should discuss the question as to whether they had *locus standi* under the Pharmacy Acts.

Mr. MUIR MACKENZIE, legal adviser, explained that this matter had been considered and he was perfectly clear that the case came within the jurisdiction of the General Medical Council.

Mr. MORISON thereupon opened the case on its merits. He said that this complaint had been submitted on behalf of the Pharmaceutical Society because that society had felt that while they were charged with the duty of enforcing the Pharmacy Acts in Scotland a practice had arisen in that country which really nullified the statutes. Dr. Martin Thomson's case was a typical one. In it there were presented three different cases in which Dr. Martin Thomson's chemist shop had been the locus of offence—one of his assistants, named McIlwraith, having been convicted for the illegal sale of poison in 1897, and another, a man named John Thomson, who was no relation of Dr. Martin Thomson, having been convicted twice since that year for a similar offence. In the second of the three cases, one of John Thomson's, the poison—laudanum—which had been sold to a little girl named Waddell had been used by the girl's mother to commit suicide with. Looking to these convictions it could not be said that Dr. Martin Thomson was at all in ignorance of the law. His case seemed rather to be one of a person defying the law. Practice of the kind Dr. Martin Thomson was charged with had been rife in Scotland for a considerable time. There had been as many as 46 prosecutions of unqualified chemist and druggists' assistants, and the Pharmaceutical Society now took it to be their duty to bring the matter to the notice of the General Medical Council so that something might be done in order to stop the practice complained of. The present case was fully stated in private print before the Council, and he and the Pharmaceutical Society's assistant secretary, who was in attendance, would prefer that the Council should judge of the matter from the opinions reproduced in the print which had been expressed from the bench by the judges before whom the prosecutions he had referred to were proceeded with.

At the suggestion of the PRESIDENT Mr. MORISON proceeded to read an affidavit made by Mr. John Rutherford Hill, Edinburgh, assistant secretary of the Pharmaceutical Society, who attends to the business of the society in Scotland. This affidavit bore out Mr. Morison's opening statement. It declared that Mr. Hill knew of the practice complained of in this case being carried on in the large towns of Scotland. It referred to the custom prevailing in Scotland of medical practitioners owning chemist and druggist shops, with surgery attached, and pointed out that it was the custom for the medical practitioner to attend a shop for two hours or so and leave the place for the rest of the day in the entire charge of an assistant who was not qualified under the Pharmacy Acts of 1852 and 1868. The Pharmaceutical Society regarded this custom of thus employing unqualified assistants as not only constituting a serious danger to the public but as really the "covering" of unqualified persons so as to enable them to practise. The affidavit further declared that Mr. Hill had produced the evidence for the prosecution in the 46 cases referred to and stated that Mr. Hill was present and heard all that took place in regard to them. Mention was specially made of the cases of Dr. Martin Thomson's assistants and the explanation was given that the law was that the actual seller was the person who made the sale and a conviction for illegal selling could take place only in the case of an assistant who sold and not in that of his employer. In concluding Mr. Morison mentioned that the unqualified assistant, John Thomson, was still in charge of Dr. Martin Thomson's chemist shop.

Mr. HILL was called to prove the truth of his affidavit and, in answer to Sir HECTOR CAMERON, he explained that an assistant qualified under the Pharmacy Acts could sell to children without offence.

Mr. MORISON wished to go into the witness-box in order to corroborate Mr. Hill's evidence in regard to what took place in the Sheriff's Court at Airdrie, Lanarkshire, at John Thomson's two convictions, but as Mr. SAUNT stated that the defence did not dispute these two convictions the PRESIDENT pointed out that what Mr. Morison offered to do need not be done. The case in support of the summons was thereupon closed.

Dr. MARTIN THOMSON was then called in his own behalf. He stated that he was now employing a fully-qualified man in his shop at 141, Grange-road, Airdrie. Neither McIlwraith nor John Thomson had ever acted as a medical assistant to him. Both had sold poisons, but not with his consent. They were to sell only if he was present in the surgery. After his conviction McIlwraith had been dismissed. John Thomson had been kept on and was still doing duty in the shop. The reason of that was this, that witness could not get an assistant with the proper qualifications whom he might employ permanently. He had tried to get such an assistant, but there was great difficulty in Scotland in getting assistants qualified under the Pharmacy Acts. John Thomson was about 25 or 26 years of age and he was a thoroughly able man. McIlwraith was also a capable man. The qualified man he had at present was not a permanent assistant. He was with witness for a fortnight only while a wholesale druggist firm in Glasgow was trying to get him a man whom he could employ permanently.

In cross-examination Mr. MORISON asked why John Thomson was not dismissed after his first conviction. Witness replied that that was because he had given him instructions not to sell poisons while witness was not at the shop. Asked if he admitted the necessity of having a qualified assistant in the shop witness replied that he admitted the necessity there was for the sale of poisons when he was present in the surgery. He could not tell daily from the appearance of the bottles whether John Thomson was or was not selling poisons, because the sale of poisons in his shop had always been very rare, so much so that he did not think the whole sales, apart from what was used for private prescriptions, would amount to £3 a year.

You have seen that the Medical Council requires immediate personal supervision of such persons as John Thomson; do you say that the sales in regard to which your assistants were convicted were made under your personal supervision?—No; otherwise the men would not have been taken into court.

Replying to Mr. HORSLEY, Dr. MARTIN THOMSON said that his shop in Grange-street, Airdrie, was open from 9 A.M. to 7 P.M. Witness attended at it from 11 A.M. for an hour and from 6 to 7 P.M.

Mr. HORSLEY wished to draw attention to a statement in Dr. Martin Thomson's reply to the Council's summons. The notice issued by the Council as to the employment of unqualified assistants set forth that its provisions did not

apply to the legitimate employment of dressers, midwives, and dispensers. Dr. Martin Thomson, perhaps relying on memory, seemed to have read that notice as having set forth that the employment of unqualified dispensers and surgery attendants was permissible. There was a very substantial difference between these two readings, and what he wished to ask was this: whether after the first conviction witness considered the subsequent employment of John Thomson as legitimate employment?

The Witness: I thought so.

Mr. HORSLEY: Why did you think so in view of the fact which had been proved that such employment was contrary to the conditions of the Pharmacy Acts?

The Witness: Because the custom is so universal in the West of Scotland, all round about, and even in the East of Scotland, and it has been so for years.

Mr. HORSLEY: Then I am to take that as an answer to my question?

The PRESIDENT: Yes.

Sir DYCE DUCKWORTH: How many times would it happen that the sale of poison was refused because you were not in the surgery?

The Witness: That happened rarely, simply because the sale of poison was so little.

In answer to questions by Dr. BRUCE, Dr. MACALISTER, Sir WILLIAM THOMSON, Dr. LITTLE, and Dr. GLOVER, Dr. MARTIN THOMSON explained that the sale of laudanum to the girl whose mother committed suicide with the poison took place when he was absent from the surgery. He could not tell how much was asked for or what price was paid for the laudanum given out. He did not know whether it was a half ounce or not. He trusted to his assistant to keep his stock and price it so much that if he ever sold anything over the counter—and sometimes he did so—he had to ask his assistant what price had to be charged. John Thomson had been years in trade before witness got him as an assistant. Witness did not suppose that the sale to Waddell's girl was entered in the poison book. He certainly kept a poison book and certainly there were entries of sales of poisons in it. He did not know if these were all recent, but the entries were made by his assistant in his presence and he signed them. He had not brought the book with him. Prosecution of chemist and druggist assistants might have taken place in Scotland during the 12 years from 1888, but he had not noticed them or had not paid special attention to them. The prosecution of his assistant McIlwraith in 1897 was practically the first intimation that he had in regard to any objection to the employment of non-pharmaceutical assistants in chemist and druggists' shops. He had been in medical practice for about nine years, and it was years after he settled in Airdrie when he started the shop. At present there were five medical practitioners in Airdrie, the population of which was over 20,000. One of the medical men dispensed at his house, while three had shops. In addition, two pharmaceutical chemists had shops. The sale of laudanum should have been entered in the poison book.

Mr. BROWN: Under what Act?

The Witness: I do not know.

Mr. BROWN: Don't you know that laudanum is not in the schedule?

The Witness: I do not know.

Mr. BROWN: But that is the case and laudanum may be sold openly over the counter. You said that it was common in Scotland to keep unqualified assistants in these shops. For what are they kept?

The Witness: For dispensing and the sale of drugs. It is quite common for assistants in Scotch shops to sell drugs.

Mr. BROWN: Then the practice in Scotland differs from that in England. You consider that this man, John Thomson, would be perfectly competent to use poisons in dispensing prescriptions but not to sell them across the counter?

The Witness: Yes; and if he sold over the counter it would be against my wish.

Mr. BROWN: And the fact that it was done in the Waddell case is an incident which you regret?

The Witness: Most certainly.

By Mr. MUIR MACKENZIE: He could not lock up his stock of poisons, neither could he tell whether his assistant might during the hours when he was absent sell three-pennyworth of laudanum. He could not tell from the stock-bottle and if there was a sale the penny or three pennies would go into the common till. No record was kept of the sale of individual articles.

By Professor YOUNG: He admitted that the bottle in which the girl Waddell got the laudanum bore the name of Dr. Martin Thomson as the seller.

Professor YOUNG pointed out that while it did so Dr. Martin Thomson was not the actual seller. That had an important bearing on another matter that was before the Council.

Mr. SAUNT addressed the Council on behalf of his client. He claimed that Dr. Martin Thomson should be entirely exonerated from blame. The Council might disapprove of the manner in which things were conducted in some parts of Scotland, but a trial such as this was not the way in which to stop the practice complained of. If the Pharmaceutical Society desired to get the law altered they had their course, but it was not correct for them to induce the General Medical Council to act as prosecutors.

Mr. MORISON remarked that appeal to the General Medical Council was the only way in which his clients could get the grievance stopped, for if they took the existing law they must proceed only against the "actual sellers in fact."

After some explanations in connexion with the manner in which Dr. Martin Thomson had been summoned, which, it was declared, was thoroughly correct and adopted only after very mature deliberation, the Council deliberated on the case in private. On the public being re-admitted—

The PRESIDENT announced the decision. Addressing Dr. Martin Thomson he said: The Council have very carefully considered your case and I am instructed to read to you the judgment which they have desired me to deliver to you. It is this, that the charge which you are required to meet has been proved to the satisfaction of the Council and that the further consideration of the charge proved against you has been adjourned until the May session. You will receive a notice to appear here at the May session and you will have to produce evidence on that occasion that you are no longer conducting your business in the manner in which you have been doing. The Council feel it to be their duty to express their sense of the gravity of the offence and give you this opportunity to fully consider your position. That is the judgment which has been given.

*Proceedings in Camerâ.*

The Council sat for the rest of the day *in camerâ*.

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TUESDAY, DEC. 4TH.

The Council met again to-day, Sir WILLIAM TURNER being in the chair.

*Exemptions from Examinations.*

Mr. HORSLEY asked the representatives of the Conjoint Board for England whether any, and if so what, exemptions from any portion of the examinations of the Board were granted during 1897 and 1898 to candidates presenting themselves for examination by the Board.

Sir DYCE DUCKWORTH said that he understood the question referred only to the final examinations of the Board.

Mr. BRYANT said that his question was not so confined.

Sir DYCE DUCKWORTH read the following answer:—1. No exemptions were granted in 1897 and 1898 or in any other year under any circumstances from any parts of the Final Examination of the Examining Board in England. 2. Exemptions were granted in those years from the first and second examinations of the Board to students of recognised universities only. 3. No exemptions from the earlier examinations of the Board were allowed to candidates who have passed at any examinations except those of recognised universities. 4. As an example of the exemptions allowed it may be stated that candidates who had passed the intermediate M.B. examination of the University of London, or the first M.B. examination of the University of Oxford, or the second M.B. examination of the University of Cambridge, were exempted from the first and second examinations of the Board and were admitted direct to the final examination on producing the certificates required by the regulations. This applies to Scotch and Irish universities and to certain Indian, colonial, and foreign universities recognised for the purpose. 5. It is impossible at this short notice to give exactly the number of candidates during the years 1897 and 1898 who were granted exemption from the first and second examinations, but 100 students a year would be about the number. 6. If this question has any connexion with the returns of exceptional cases sent to the General Medical Council annually it is only necessary to draw attention to the fact that the return relates to exceptional cases "in regard to

length of course of professional study" and not in regard to exemptions from examination.

Mr. HORSLEY said that he was sorry to say that this answer did not satisfy him at all, and he would move that the representatives of the Conjoint Board in England be requested to furnish the Council in writing the individual cases of exemption from any portion of the examinations of the Board granted during 1897 and 1898. He wished, of course, to point out that he only took the case of this Board as an example.

The PRESIDENT suggested that the request should be addressed to the officials of the Conjoint Board and not to the representatives on this Council.

Professor YOUNG thought that the request should be addressed to all the examining bodies in the United Kingdom.

Sir DYCE DUCKWORTH agreed that it was rather invidious to single out the Royal Colleges in England in this way.

As the outcome of some further discussion the motion was passed in this form:—

That the medical authorities who grant exemptions in any part of the professional examinations which they hold be requested to furnish the Council with a detailed list of the exemptions granted by them in the examinations held during 1897, 1898, and 1899.

*The Council and the Royal Colleges in England: Sharp Conflict.*

The Council then resumed the debate adjourned from May 31st, 1900, on the recommendations in the report of the Education Committee on certain communications from the Royal College of Physicians of London and the Royal College of Surgeons of England. When the debate stood adjourned Dr. MACALISTER, seconded by Dr. PAYNE, had moved that the Council approve of Recommendation I., which was in these terms—viz.: "1. On the first question the committee maintain the opinion they have frequently expressed that ordinary school education should be completed before the five years' medical curriculum is entered upon; and they believe that the regulation in question is the simplest practical method of insuring this. They therefore recommend that the Council should continue to adhere to it." The regulation in question is: "That no medical student shall be registered until he has passed a preliminary examination as required by the General Medical Council and has produced evidence that he has commenced medical study at a university or school of medicine or at a scientific institution recognised by one of the licensing bodies and approved by the Council."

The PRESIDENT explained that since the debate in May the opinion of Mr. Muir Mackenzie had been obtained and was now before the Council. They had also before them the opinion of Mr. Cripps, Q.C., obtained by the Royal Colleges.

Mr. BRYANT said that he had a great wish to make this question between the Council and the Royal Colleges as clear as possible, and with this view he had drawn up a short memorandum which he would read. The memorandum was in these terms, viz.:—

Moved by the desire to make the position of the London Royal Colleges, in the question before us, as clear as possible, I have drawn up an epitome of the reasons which have influenced them in their action, as a supplement to the full statement contained in the memorandum appended to the report of their Committee of Management, printed on page 425 of vol. xxxvii. of our Minutes for this year. The English Colleges were desirous of making chemistry, physics, and biology subjects of study before the medical student began his professional career, under the conviction that it would be desirable to have these preliminary scientific subjects studied and got rid of by an examination test before the special medical curriculum was commenced.

With this object the Colleges accepted the teaching of these subjects at such schools and institutions—other than medical schools—as in their judgment afforded a high standard of efficiency; and to test this standard the schools were visited by representatives of the Colleges, with the exception of those which had been approved by the authorities at South Kensington—and more recently most of those schools have been and all will soon have been visited.

This Council, when the Colleges made this arrangement, sanctioned their procedure, as testified by the following minute of the Council, to be found in vol. xxxi., p. 162:—

Moved by Dr. Tuke, seconded by Dr. Bruce (Dec. 4th, 1894):—

"A student who has previous to registration attended a course or courses of study in one or all of the subjects, physics, chemistry, and biology, in any university, school of medicine, or teaching institution recognised by any of the licensing bodies, may without attendance be admitted to examination in these subjects: provided always that such course or courses shall not be held to constitute any part of the five years' course of professional study."

The Colleges at that period in 1894 hoped that the students of these subjects would qualify in them before they commenced their five years' curriculum, and that the period of study of these subjects would be included in the work of the year before registration, and they did so under the opinion that the scheme as sanctioned by this Council would be a step towards the realisation of the wish that the subjects of study would soon form part of a preliminary scientific examination which the medical student would in the near future be called upon to pass before he entered upon his more special professional work.

In this hope the Colleges have been disappointed, for the sister Colleges have not shown any disposition to follow their example, and the students who adopted the scheme in London soon discovered that the six or nine months which were taken up by the study of these subjects before registration gave them no advantage over their fellow students who took these subjects up as part of their five years' curriculum, as they had still five years of professional study to fill up.

Under these circumstances the London Colleges were unable to maintain their advanced position and adopted, although with regret, the ways of the other Colleges and universities which count as part of the five years' curriculum the time spent in the acquisition of these subjects when taken either at a medical school or at a recognised teaching institution.

But in so doing the Colleges continue to recognise the teaching of the accepted schools and institutions which they had previously recognised and at the present time deduct only from the full five years' medical curriculum the six or nine months which may have been spent in the acquisition of the required information, which has, moreover, to be tested by an examination. In fact, the London Royal Colleges in this matter place themselves alongside the London University, new or old, and are satisfied—if the examination test proves satisfactory—with the teaching which preceded it. And for adopting this practice some members of this Council have expressed their strongest disapprobation of our action and assert that the London Colleges, by their change of position, have practically nullified the regulation requiring a fifth year of medical study and have reduced the curriculum to the old four years' course. Whereas, under the scheme of the Colleges as now carried out, however long a period a student might take in passing the examination in these preliminary subjects—whether it be one, two, or more years—he is still required to devote four full years to his special professional studies; whilst in following the scheme this Council is now urging us to maintain, where, as in a large number of cases, the Preliminary Science Examination is not completed in one year, the more special professional subjects are necessarily crowded into the remaining period of the curriculum, which thus becomes less than four years, and at times seriously so.

With respect to the refusal of the London Colleges to give up to this Council the approval of the list of institutions which the Colleges may recognise for the purposes of study, I can only adduce two reasons: the first being that the Colleges are authorised, if not bound, by their Charters to bear the responsibility, and consequently cannot evade it; secondly, that if we handed over to this Council the power of selection we should be imposing duties upon the Council which it could not possibly satisfactorily carry out and which do not fall within its powers.

Under these circumstances it seems a pity that this Council should have entered upon a course of action which may seem to interfere with the rights and privileges of the Royal Colleges and at the same time involve this Council in duties which they have no power to undertake.

Sir DYCE DUCKWORTH said that his College, the Royal College of Physicians of London, had furnished the opinion of counsel and had no further information to give. The position of the two Colleges remained as before, nothing having happened to alter it. Any change that took place must take place in this Council.

The Council agreed to receive the cases put before the two counsel and their opinions and enter them on the minutes.

The Registrar read to the Council the opinions, viz.:—

MR. CRIPPS'S OPINION.

| *Questions.* | *Answers of Counsel.* |
|---|---|
| I. Generally, whether the General Medical Council have any and what authority to lay down rules binding the Royal Colleges as qualifying bodies, constituting the Examining Board and interfering with the exercise of their discretion in the discharge of their duties? | I. The General Medical Council have no authority to lay down rules binding the Royal Colleges, as the qualifying bodies constituting the Examining Board, nor can they interfere with the exercise of their discretion in the discharge of their duties. |
| II. And in particular whether the Medical Council have any or what authority to control the Royal Colleges in their selection of teaching institutions recognised by them for courses of instruction and study before admission to examination? | II. It is clear that the General Medical Council have no control or authority in the selection of teaching institutions. |
| III. Whether the Medical Council have any statutory or other authority for their regulations as to the registration of students and resolutions thereto (of which a print is sent herewith), or can such "regulations" and "resolutions," or any other regulations or resolutions be received by the Royal Colleges only for what they are worth as recommendations? | III. The registration of students is a voluntary Registration Council Act for the convenience of all parties concerned. The Royal Colleges can by altering their own examining regulations disregard entirely the registration of students. If the Medical Council seek to introduce qualifications for registration of students including matters quite outside their jurisdiction it may be necessary for the Royal Colleges to alter their own examining regulations; but if the Medical Council merely desire to carry out their own duties, and there is a difference of opinion between the Council and the Royal Colleges, this difference could be brought for decision before the courts. |

IV. If the Medical Council have no such authority as is referred to in questions I., II., or III., then what remedy have the Royal Colleges against the Medical Council, by mandamus or otherwise, for obstructing the Colleges in the lawful discharge of their duties by refusing registration of students?

V. Generally in the matter.

IV. It is not a case for mandamus, but I think an action could be brought on the Chancery side asking for a declaration that the resolution which has been communicated, and to which the Royal Colleges object, is beyond the powers of the Council, and an infringement of the rights of the Royal Colleges.

V. I should advise a meeting between representatives of the Council and the Royal Colleges in order to agree, or, in the event of agreement not being possible, to act in concert in order to obtain the opinion of the court in the least expensive and most satisfactory way.

(Signed) C. A. CRIPPS.

MR. MUIR MACKENZIE'S OPINION.

I have fully and carefully considered the facts stated in the case and the questions in which my opinion is desired. I have also very carefully considered the effect of the provisions of the Medical Acts of 1858 and 1886 which apply to those questions, of which the most important are Sections 18, 19, 20, and 21 of the Act of 1858, and Sections 3 and 4 of the Act of 1886. I have also referred to and considered the resolutions of the General Council, the terms of which are set out at pages 74 and 161 of the Council's Minutes for 1898, which are (I assume) those, or amongst those, to which the Royal Colleges object.

My opinion on the questions on which I have been asked to advise is as follows:—

1. The General Medical Council is not, in passing resolutions embodying the opinion and recommendations of the Council with regard to the course of professional study which the licensing bodies ought to prescribe for their students, and communicating those resolutions to the licensing bodies, infringing any rights of the licensing bodies, or acting in excess of the Council's powers.

2. The General Medical Council is acting within its powers and rights in prescribing a regulation to the effect that no medical student shall be registered in the Students Register until he has passed the preliminary examination as required by the Council and has produced evidence that he has commenced medical study at a university or school of medicine or at a scientific institution recognised by one of the licensing bodies and approved by the Council. The contention of the Royal Colleges that by prescribing this regulation as one which must be complied with by students as a condition of being registered in the Students Register the General Council is infringing the rights of the Royal Colleges, or acting in excess of its powers, cannot, in my opinion, be maintained.

3. The refusal of the General Medical Council to register in the Students Register students who do not comply with the Council's regulations as specified in the Council's resolutions will not give either to the licensing bodies to which the students belong or to the individual students any right to institute or maintain any legal proceedings against the Council.

4. The General Medical Council has no power to compel the licensing bodies to comply with the requirements and recommendations contained in the resolutions of the Council with reference to the courses of preliminary study to be gone through by students. If the licensing bodies decline to be bound by or adopt the recommendations of the Council there is no form of proceeding by which the licensing bodies can be ordered or compelled to adopt the Council's recommendations. The only power which the General Council can exercise in such a case is that of making a representation to the Privy Council. But the General Council can only make a representation to the Privy Council if it appears to the General Council, on the information which it has obtained as to the courses of study and examinations to be gone through in order to obtain the diplomas of a licensing body, by means of the inquiries which the Council can make under the 18th Section of the Medical Act of 1858, and the attendance of members of the Council at the examinations, that the course of study and examinations of the licensing body are not such as to secure the possession by the holders of its diplomas of the knowledge and skill for the efficient practice of their profession.

5. I would add in reference to the opinion of Mr. Cripps, Q.C., a copy of which has been sent to me that in my opinion no such legal proceedings as are indicated in paragraphs 3 and 4 of that opinion could be maintained in the high court against the General Medical Council. (Signed) M. MUIR MACKENZIE.

In order to facilitate discussion it was agreed that the Council should go into committee of the whole Council for the consideration of the recommendation.

Dr. MACALISTER said that when he moved the adoption of the recommendation in May he pointed out that they of the Education Committee were of opinion that in the present state of the law this Council had no power to compel any body to adopt their views in regard to medical education or registration by any direct action—that all they could do if they were dissatisfied was to make a representation on the subject to the Privy Council. He also pointed out that in the case of the registration of students the Students Register was a creation of their own and they had entire control over it—that they could say who should be admitted to it and who should not be admitted. It appeared to him that there was nothing in the law contrary to these views entertained by the Education Committee. Mr. Cripps maintained that they had no power to compel the Royal Colleges to do anything, and Mr. Muir Mackenzie said the same thing, and both counsel said that the rules of registration were matters within the power of the Council and the Council alone. It seemed to him that if they chose to make any rule as to the registration of students the legal opinions they had received entirely supported them as to their power of doing so. The question, therefore, was not a legal one any longer, but a question of wisdom and expediency. The question was whether it was a right and proper thing that students should or should not have finished their course of education at the ordinary school before they became technically medical students. He had no doubt as to the wish and intention of the Council in this matter. The Council had decided that there should be a five years' course of medical study. There were many utterances of the Council on the subject, including this one: "That the period of professional study between the date of registration as a medical student and the date of the final examination for any diploma entitling to registration shall be a period of *bonâ fide* study during not less than five years." He had before him a list of nearly all the schools recognised by the Royal Colleges in England. Six months ago he mentioned three higher grade board schools, now called higher elementary schools, supported out of the rates, intended for children of the elementary education stage. By a recent decision of the Council of the Board of Education such schools would be open for the scientific instruction of children of not more than 15 years of age—that was to say, the child must leave such a higher grade school at the end of the year in which it was 15 years of age These schools were very well fitted for teaching chemistry and physics in their elementary aspects to children of that age, and they qualified for the examinations of South Kensington and for earning grants, but would it ever have crossed anybody's mind that such a school would be regarded as a medical school? He was credibly informed that two at least of these schools advertised that they were medical schools recognised by the Royal Colleges. Where was this going to stop? There were 100 or more schools recognised for this purpose throughout the United Kingdom. Looking at the grade or class of school already admitted, it was very difficult indeed to find a precedent for the rejection of any school, whether public or private, or board or anything else. The Royal Colleges had entered upon a course to which there was no obvious end. They would have to recognise all the schools in the country because in their own interests the various schools would have to fit themselves up with appliances for teaching physics and chemistry. That he would call the *reductio ad absurdum*. These schools were never intended to be medical schools and they were never intended by this Council to be so called. The question was whether this Council should approve of the thing if they could not stop it. His own feeling was that they would be doing a most disastrous thing for medical education if they approved it. They could not control but they could at least say that the Students Register, which was issued by the authority of this Council, should not contain the names of these places, which they could not honestly approve as places of medical education. That was the only method which they had of checking what they thought was apt to become an abuse. For himself he had been wondering whether it would not do for neither this Council nor the Colleges to have anything to do with these secondary schools. How would it do if they said that no student should be registered unless he had passed a recognised preliminary examination and unless he had studied at a recognised medical school? If they wiped out these scientific institutions this Council would be saved all question of recognition and so also would be the Colleges. This, of course, would require to be accompanied by something else. They would have to allow that when a student had passed the recognised preliminary examination in general education he might be admissible to the preliminary scientific examination right away without having necessarily entered a medical school, and then when he did enter a medical school he would register, having got that examination behind instead of in front of him.

The PRESIDENT: That would be four years.

Dr. MACALISTER said it would still mean five years. The five years contemplated by that Council were five years of medical study, and if the schools had elaborated their education so as to include elementary drilling in chemistry, physics, and biology so much the better for the pupils who had attended them. He thought that students were as much entitled to the benefit of their education in these subjects as in Latin, or Greek, or French, or German. That was the

suggestion which he had to offer. It would, of course, mean asking the Education Committee to draw up detailed rules, but it seemed to him that it would solve the difficulty and avoid a conflict between recognition and approval and all trouble with regard to the inspection of these secondary schools.

Mr. TEALE suggested that there might with advantage be a conference between the Council and the Royal Colleges.

Sir CHRISTOPHER NIXON protested that the scheme sketched by Dr. MacAlister would revolutionise the five years' medical curriculum, because if it could be once shown that favour was given to large bodies like the Royal Colleges of Physicians and Surgeons of England concessions would have to be made all round. The medical profession looked to this Council to secure uniformity of action among the medical authorities of the United Kingdom, and it should not be shown them that, after all, the Council had only the power to express pious opinions.

Dr. GLOVER, who regretted that the Council had to face such difficulty at the fag end of their present session, rose to propose a motion which he hoped would bring the discussion to a close. What he wished to move was:—

That the President of the General Medical Council and the chairman of the Education Committee, with two other members of the latter, be empowered to meet the representatives of the Colleges with a view to the amicable settlement of this question, as suggested by Mr. Cripps, Q.C., in his answer V. of his opinion, and to report to the Council.

Such a resolution, he thought, would bring the present crisis to an end. They would not come to any grave disaster if they let things remain as at present, and he urged that the motion should be passed until at least next session.

Mr. TEALE seconded the proposal.

Dr. BRUCE trusted that the Council would make their five years' curriculum really five years' medical study, which he believed might be secured by the adoption of such a scheme as that put forward by Dr. MacAlister. There were deficiencies in the existing arrangement that might be remedied. For instance, the teaching of chemistry should be made far more thorough. Two or three years should be given to the subject in order to let the matter set in the student's mind, but he spoke from experience when he said that a great deal of the chemistry teaching of the present day was no more than tuition to enable students to secure a pass. Then there was the fifth year. Originally that had been proposed so as to obtain a full year for clinical study, but he challenged anyone to say that a tithe of the fifth year was given up to clinical study.

Mr. POWER mentioned that they used to have chemistry and biology taught in the second year. If they were going to eliminate them there would be this difficulty—What would they put in place of chemistry?

Dr. BRUCE: Medical chemistry.

Mr. POWER considered that Dr. Bruce was drawing a distinction that would not hold water. He should like the subjects in question taught to young people and to see them brought up to the quality given in the medical schools He hoped that Dr. MacAlister's scheme did not contemplate a sixth year of study. It seemed to mean that.

The PRESIDENT pointed out that members were wandering through matters that were not before the Council. The only subject before them was Dr. Glover's motion. In answer to Mr. HORSLEY, he added that instructions to a committee could not be given until the committee was appointed.

Dr. MCVAIL suggested that a vote on the motion should be taken at once.

Sir JOHN BATTY TUKE said that as chairman of the Education Committee he had held his tongue up to that moment simply in the hope that he might get some guidance out of the difficulty the Council were in. For many months past he had given much thought to this question, but he must confess that he still felt himself absolutely unable to come to any conclusion whatever. He could not vote for Dr. Glover's proposal because it meant only another postponement of settlement of the difficulty and he did not think the old way should be trod over time and again without result. As an individual member of the Council he wished to give expression to what he believed was in the mind of nearly everyone present, and that was this, that the Council were urgently called upon to decide whether the General Medical Council was the Council of Medical Education or whether the Council of Medical Education was to be put into the hands of the two great English Royal Colleges. That, to his mind at any rate, was the whole matter. The two great Colleges laid down regulations differing from those of the General Medical Council. These regulations, if continued, must be followed in the case of the minor bodies, and therefore the Colleges became practically the arbiters of medical education in this country. There was only one way in which to meet the case, and that was to fight it to the bitter end. He would rather fight and lose than go on in the way in which the Council were going on now. There was a demand for a new Act. If there was a new Act it would simply end the Council.

Dr. PYE-SMITH urged that if the Council were to embark on a legal struggle with the Colleges it would be to them a perfectly ruinous strife. They should go to almost any point sooner than go to law. If they gave up mutual recriminations he believed that they might come to a settlement.

Sir WILLIAM GAIRDNER said that he had seen nothing to disturb his original opinion that the Royal Colleges were moving in the right direction in trying to get elementary science teaching introduced into what Irish members called grammar schools, for he thought that the whole trend of the future would be to bring elementary science teaching into the elementary schools and make the upper forms of these schools places in which the elementary ideas of science could be communicated as the first portion of medical education. No consideration would induce him to evade in any way an attempt to turn science more broadly into the so-called grammar schools. On the other hand, he thought that the Colleges, as a matter of expediency, were wrong in taking upon themselves to lop off, as it were, one of the five years of medical study as set forth in the Medical Council's scheme. Now that they had taken the step he strongly wished that something like what Dr. MacAlister had suggested could be adopted as likely to bring them out of their difficulty, and meanwhile he should support Dr. Glover's motion.

Dr. MCVAIL, on the other hand, was opposed to Dr. Glover's proposal on the ground that it meant delay for another six months at least and the Council might take it for granted that the triple board in Scotland and the double board in Ireland would before the end of the period named have made their arrangements on the lines of those of the English Colleges, so that if the Council went into conference with the Colleges now they would be losing six months that they would never recover.

Mr. BALL contended that the matter under discussion was one of vital importance to the Irish medical corporations, and his belief was that if a large body like the Conjoint Board of England insisted on continuing in the course they had adopted in respect to the preliminary medical subjects other licensing bodies would have to follow so as to be able to face the very great competitive advantage which the English Conjoint Board would have.

A division was then taken, but as only eight members voted in support and the rest against Dr. Glover's proposal was rejected.

Dr. MACALISTER, seconded by Dr. MCVAIL, moved the adoption of Recommendation I., the text of which appears above.

Dr. PAYNE agreed with the spirit of Dr. Pye-Smith's remarks and expressed the hope that nothing like legal proceedings as between the two bodies interested would be adopted. Still, it appeared to him that if legal proceedings were to be avoided some concession was needed and that concession would require not to be a one-sided concession. The difficult matter was to find something that would prove acceptable.

Mr. HORSLEY, remarking that he had not spoken on this question himself, but considered that it had been amply argued by other members of Council, moved the closure.

Dr. BENNETT seconded the motion.

On a division 21 voted for the closure and 5 against. Three members did not vote and two were absent.

Sir DYCE DUCKWORTH explained that one reason why he had voted against the closure was that he had been seeking an opportunity to speak all the afternoon and had not obtained it.

The Council proceeded to a division on the proposal to adopt Recommendation I., with the result that 21 voted for the recommendation and 5 against. Again three members did not vote, while two were absent.

The Council resumed and approved of the report of the Committee's adoption of the recommendation.

Dr. MACALISTER moved—

That the Royal Colleges should be informed that the Council had resolved to adhere to their regulation in regard to the registration of medical students which came into effect on the 1st of January, 1900.

Sir J. BATTY TUKE seconded.

Sir DYCE DUCKWORTH advised the Council to consider

the full gravity of the position they had reached in deciding to send to the Royal Colleges intimation of their adherence to their former regulation in regard to the registration of medical students. He could not say what would be the result, but his own impression was that the Council's decision could not possibly receive the assent or the agreement, at all events, of his College—the Royal College of Physicians of London. The state of tension would continue in the future as it had been going on for the last 12 months, and he supposed the ultimate result, if the Council also resolved to adopt their Recommendation III., would be that the Royal College of Physicians would open its own office for registration. He reminded the Council that the Royal Colleges in question had to maintain intact the rights and privileges which they possessed under Acts of Parliament and Royal Charters, and their officers had to yield nothing to anybody. That they meant to do, and recognising fully the state of tension which at present existed and lamenting it very much he wished to say with an impartial voice—perhaps this was one of the last times he was using it in the General Medical Council—that he did think that the Council were overstepping their boundaries and going outside the Act in order to encroach in any way on the privileges of the Royal Colleges. He did not think that members of the Council realised what would happen if the Conjoint Board of Scotland was to be treated in the way the English Royal Colleges had been treated. There were medical bodies in this country who took no precautions whatever in respect to education, but the General Medical Council for some reason did not touch them. If the two English Royal Colleges were on all fours with these bodies, how was it that the state of tension between the Colleges and the Council had arisen?

Dr. MACALISTER: The Royal Colleges are the only bodies that have raised objection.

Mr. BROWN: If there are others name them.

Sir DYCE DUCKWORTH: The Scottish Conjoint Board have acted in the same way as the English Conjoint Board.

Sir JOHN BATTY TUKE and Dr. HERON WATSON, the representatives of the Scottish Conjoint Board, declared that that was absolutely not the case.

Sir DYCE DUCKWORTH: At all events, the Scottish Board accept all the bodies who are accepted by the English Board, and I think it is out of place and beneath the dignity of a body like the General Medical Council to attempt to enforce proceedings which they have no power to enforce.

Sir WILLIAM THOMSON reminded the Council that their regulations were not formed with regard to any particular body, but for the direction and control, if they had any control, of all the licensing bodies, and the matter came before the Council because the Royal Colleges in England alone among the bodies systematically disregarded the advice and regulation of the Council. What he had prophesied had happened, for it had come out in the course of the debate that some of the schools recognised by the Colleges termed themselves medical schools and advertised themselves as medical schools. If this Council were to have any say in medical education they could not stand by and see such a thing. It was casting a slur upon the dignity of the profession to which they belonged. Something had been said about conciliation, but he would point out that the representatives of the two Colleges had voted against the proposal for a conference. That meant, what he supposed they should have to face presently, war. If the Royal Colleges in England had rights to defend, so also had the bodies in Ireland and Scotland, and they were just as jealous of them as the English Colleges. It had been said that if the English Colleges were allowed to go unchallenged the other Colleges would return to the four years' curriculum and he was authorised to say that his College would certainly do so. There surely was no reason why the Irish and Scottish bodies should be placed at a disadvantage in this respect. He therefore hoped that the Council would adhere to their regulation.

Mr. BRYANT protested against the imputation that the Royal Colleges in England had reduced the curriculum from five to four years. They had done nothing of the sort. The Colleges maintained that the best thing for a man to do in his professional education was to get rid of these preliminary subjects in his first year and not allow them to intrude into the work of the subsequent years. Some members had spoken as though the Colleges had nothing but board schools on their list, but he would remind the Council that the list contained such schools as Harrow, Charterhouse, Epsom College, and the Newcastle College of Science. In these and many other schools appearing on the list the teaching was infinitely better than in many of the schools connected with hospitals.

Dr. MACALISTER: Does Mr. Bryant mean to suggest that it is not true that there are board schools on the list?

Mr. BRYANT: Not at all.

Dr. MACALISTER: Why, I have a string of them here.

Mr. BROWN urged the Council to stand by their regulation.

The motion was then put and carried by 20 votes against 5.

On the motion of Dr. MACALISTER, seconded by Dr. BENNETT, two resolutions were passed, one to the effect that it be remitted to the Executive Committee, with such advice as they might think fit to obtain, to draw up and submit to the Council for approval a list of scientific institutions study at which shall qualify for admission to the Students Register; and the other to the effect that in the meantime individual applications for students' registration which the Registrar in the absence of special instructions cannot at present accept be referred to the Students' Registration Committee as exceptional cases to be dealt with on the lines laid down by the Council.

This closed the discussion of the subject.

*Examinations of the Apothecaries' Hall of Dublin.*

Sir DYCE DUCKWORTH presented reports from the Examination Committee with regard to the inspection of certain of these examinations.

The motion that the reports be received and entered on the minutes was under discussion when the Council adjourned.

# Medical News.

FOREIGN UNIVERSITY INTELLIGENCE.—*Lemberg:* Dr. Victor Wehr has been promoted to an Extraordinary Professorship of Surgery; Dr. Gustav Bikeles has been recognised as *privat-docent* of the Anatomy of the Nervous System.—*Moscow:* Dr. P. Uskoff has been recognised as *privat-docent* of Surgery.—*Naples:* Dr. Giulio Ascoli has been recognised as *privat-docent* of Medical Chemistry.—*Tübingen:* Dr. B. Honsell has been recognised as *privat-docent* of Surgery.

THE BRITISH GYNÆCOLOGICAL SOCIETY: ANNUAL DINNER.—The annual dinner of the British Gynæcological Society was held at the Café Monico on Nov. 29th, when a most enjoyable evening was spent. Dr. W. J. Smyly, the President, was in the chair. Among the guests present were the President of the British Medical Association, Sir Henry Roscoe, F.R.S. (Vice-Chancellor of the London University), Sir William Thomson, Professor C. B. Ball, Dr. Lombe Atthill (President of the Royal Academy of Medicine in Ireland), Dr. J. Watt Black, Sir James Dick, K.C.B., R.N., Sir Christopher Nixon (President of the Royal College of Physicians in Ireland), Dr. R. Milne Murray (President of the Edinburgh Obstetrical Society), and Mr. Robert Jones. The toast of "The Guests" was (in the unavoidable absence of the Director-General of the Royal Navy) responded to by Sir James Dick and Sir William Thomson. The latter referred to the work done by the Irish Hospital in South Africa and to its mobility. He described the march from Bloemfontein to Pretoria with Lord Roberts, dwelling upon the endurance, discipline, self-denial, and courage of the British soldier, and warmly repudiating the imputations which had been recently uttered by Mr. Kruger with regard to the British Army. He deplored as exaggerated and unpatriotic letters which had appeared with regard to the treatment of our soldiers in the campaign. He had not seen anything himself to justify such representations. Considering the exigencies of war and its first demands everything that could be done had been done. The Palace of Justice, a splendid building in Pretoria, in which they were located, offered exceptional advantages for the care of the sick and wounded. Within four days of its being given up to them they were able to accommodate 80 wounded and their results would compare favourably with those of home hospitals. The President of the British Medical Association in proposing the toast of "The British Gynæcological Society" referred to the foundations of the great obstetrical societies of Edinburgh and London, the latter being of a comparatively recent date as compared with the former, and he dwelt on the progress which made the foundation of a gynæcological

society a necessity from the rapid advance in gynæcological science apart from obstetrics. He traced the early history of the society and referred to the good work which it had done and the great advantage which it had been to the profession at large by the diffusion of knowledge in this particular branch, and in coupling the toast with the name of the President he alluded to the high position which that gentleman occupied as an obstetrician. The President suitably replied. The toast of "The Universities and Medical Corporations" was proposed by the President of the Obstetrical Society of Edinburgh. He emphasised the objects of a university for the furtherance of research, quite apart from its teaching functions, expressing a hope that the new University of London would proceed on these dual lines which would insure its ultimate success. He believed that the corporations generally did their duty conscientiously with regard to the fitness of those whom they admitted into the profession and that they had the confidence of the public. Sir Henry Roscoe, who replied for the universities, briefly sketched the outlines on which the University of London would be conducted. There would be the same liberal attitude to all, both men and women, who could take advantage of its teaching and degrees. At the same time the high standard which had been aimed at by the London University in the past would be strictly maintained. He referred to the Institute of Preventive Medicine as a great means in the advancement of medical science, so great that it was hardly appreciated to the extent that it ought to be, and to which the liberality of Lord Iveagh had so largely contributed. Sir Christopher Nixon replied for the corporations in an interesting speech. The Westminster Glee Singers contributed considerably to the success of the evening.

LITERARY INTELLIGENCE. — Messrs. W. B. Saunders and Co. announce the immediate publication of the following works:—Beck's Fractures; Bohm, Davidoff and Huber's Text-Book of Human Histology, including Microscopical Technic; Dorland's Illustrated Medical Dictionary; Friedrich and Curtis on the Nose, Throat, and Ear; Heisler's Text-book of Embryology; Jackson's Manual of Diseases of the Eye; Leroy's Essentials of Histology; Levy's Elements of Clinical Bacteriology; Nancrede's Lectures on the Principles of Surgery; Ogden's Clinical Examination of the Urine and Urinary Diagnosis; Pyle's Manual of Personal Hygiene; Salinger and Kalteyer's Modern Medicine; Scudder's Treatment of Fractures; Stoney's Surgical Technic for Nurses; and also new editions of the following works:—Anders' Text-book of the Practice of Medicine; Da Costa's Modern Surgery; Garrigues' Diseases of Women; Howell's Text-book of Physiology; Hyde and Montgomery's Venereal Diseases; McFarland's Text-book upon the Pathogenic Bacteria; Senn's Pathology and Surgical Treatment; Stengel's Text-book of Pathology; Stevens' Manual of the Practice of Medicine; and Warren's Surgical Pathology and Therapeutics.

IRISH MEDICAL SCHOOLS' AND GRADUATES' ASSOCIATION.—This association held its autumn dinner on Nov. 28th, at the Hotel Cecil, under the presidency of Inspector-General W. H. Lloyd, R.N., honorary surgeon to the Queen. The company numbered upwards of 100 members of the association and their guests. After the usual loyal toasts the health of "Our Defenders" was proposed by Dr. Stokes and responded to by General Sir William Olpherts, V.C., G.C.B., a guest of the association, who spoke in a hearty and emphatic manner in praise of the healing art, while he warned his hearers against the materialistic view that sees in a patient only so much flesh and blood. Major Clifford of the 1st Royal Engineers (Volunteer) also responded. Dr. James Little proposed the guests, for whom the Rev. Sir Borradaile Savory, rector of St. Bartholomew the Great, E.C., and Mr. Alfred Perceval Graves, the author of the famous ballad "Father O'Flynn," replied. Between the speeches there were interspersed songs from Miss Lilian Moreton and Mr. J. J. de Z Marshall. Previously to the dinner the autumn meeting of the association was held under the presidency of Inspector-General W. H. Lloyd, when a resolution was passed in the following words with reference to the death of a famous member of the association, the late Sir William Stokes: "That the honorary secretaries be instructed to convey to Lady Stokes an expression of the deep sympathy felt by the members of the Irish Medical Schools and Graduates Association in her recent bereavement and of the loss they had sustained through the death of one whose conspicuous talent, genius, and eloquence not only won for him the admiration of his countrymen, but secured for him a world-wide reputation, and whose distinguished services to the association entitled him to their warmest gratitude." Dr. T. Gilbart Smith, the chairman of the council, reported that a letter had been sent to Field-Marshal Lord Roberts, V.C., inviting him to honour the association with his presence at a dinner upon his return from South Africa.

MUNIFICENT BEQUEST.—The late Mr. Edward Mackeson of Hyde-park-square, London, has bequeathed £20 614 to the Surgical Aid Society which supplies gratuitously surgical instruments of all descriptions to the afflicted indigent poor.

UNIVERSITY COLLEGE OF SOUTH WALES AND MONMOUTHSHIRE.—The Cardiff Town Hall Committee on Dec. 3rd decided to recommend the town council to grant five acres in Cathay Park, free of cost, for the new building of the University College of South Wales and Monmouthshire. The value of the site is £20 000.

UNIVERSITY OF CAMBRIDGE.—During the past year 49 candidates have presented themselves for examination in sanitary science and 35 have obtained diplomas in Public Health. The annual appointments to syndicates and boards include the following:—Dr. D. MacAlister, General Board; Dr. H. K. Anderson, State Medicine Syndicate and Medical Board; Dr. Alexander Hill, Board of Agricultural Studies.

THE FIRST ANNUAL DINNER OF THE OTOLOGICAL SOCIETY OF THE UNITED KINGDOM.—Under the chairmanship of Sir William Dalby, the President, the first annual dinner of this society was held on Dec. 3rd in the Regent Saloon of the Café Monico. There were present as guests of the society the presidents of the leading medical societies—namely, Dr. F. W. Pavy, President of the Royal Medical and Chirurgical Society; Mr. John H. Morgan, President of the Medical Society of London; Mr. Watson Cheyne, President of the Pathological Society of London; and Sir Richard Douglas Powell, Bart., President of the Clinical Society of London. After the toast of "The Queen" Sir Thomas Smith proposed "The Otological Society of the United Kingdom" in an amusing speech, which had, however, its serious side. When he began to practise, he said, the condition of aural surgery was rudimentary; it certainly was not a science; it might have been called an art, but perhaps it would be more correct to designate it as being then a department of practice. Referring to the methods of aural treatment he instanced the case of a successful aurist who practised entirely with the assistance of wool off the sheep's back and described this somewhat unscrupulous specialist's methods in detail. The burnt onion, Sir Thomas Smith added, was then a means in vogue of treating aural disease, and it must have been extensively practised, for even now in the upper circles of society people can be heard asking an unfortunate individual with ear trouble: "Have you tried the burnt onion?" But after Toynbee made his admirable studies of the morbid anatomy of the ear the foundation of scientific otology was laid, and Sir Thomas Smith concluded by congratulating the society on its foundation, because such a society afforded the means of organisation and discipline and concerted action in the investigation of aural diseases. The toast was replied to by the President, who said that he was glad to see there the Presidents of the principal societies in London. He took it that those gentlemen had come to dine with them not as an empty compliment only, but in order to let them know that they believed that the position of aural surgery had very greatly improved. It meant that they recognised the necessity for the Otological Society and approved of their work as found in the Transactions of the Society, but he thought also that they came for something more—namely, to welcome the Otological Society in a kindly spirit as a sister society. He was proud to stand there and say that he was the first president of a society which he believed would be of very great use indeed in the surgical world. The idea was to make the society as cosmopolitan as possible and to maintain the best interests of aural surgery in the United Kingdom. Dr. A. W. Sandford of Cork proposed the toast of "The Guests," which was replied to by Sir Richard Douglas Powell, Dr. Pavy, Mr. Pridgin Teale, and Professor Young. Sir Richard Douglas

Powell thought that it was a great matter for congratulation that in a branch of science such as that of otology they should have a society founded for the concentration of its work and interests. Dr. Pavy, as President of one of the oldest societies, said that so far from grudging the establishment of the Otological Society, he considered that the result of its foundation would be to effect an advancement in aural surgery. Mr. Teale and Professor Young spoke in a similar sense.

IN MEMORIAM.—A brass tablet has been placed in the parish church of Palgrave, near Diss, by the Marquis and Marchioness of Northampton, in memory of Mr. J. E Simpson, L.R.C.P. Lond., M.R.C.S. Eng., who accompanied them on their visit to the Nile but who died suddenly in Cairo in March last.

THE British Medical Temperance Association held a meeting on Nov. 30th in the rooms of the Medical Society of London. Professor Sims Woodhead presided, and a paper was read by Dr. Heywood Smith on Alcohol in Relation to Women. He gave reasons for believing that female intemperance was increasing owing to several causes. He urged that one of the most urgently needed reforms was the abolition of shop licences. After a discussion in which, amongst others, Dr. R. Parsmore, Dr. C. R. Drysdale, Mr. E. J. Donbavand, Dr. J. J. Ridge, Mr. W. McAdam Eccles, Mrs. Drysdale, and the President took part, the following resolution was unanimously adopted:—

That this meeting having had under its consideration the prevalence of intemperance amongst women and its effects upon the health of the community, expresses its conviction that the existence of shopkeepers' licences promotes female intemperance and believes it to be a matter of urgency that they should be abolished.

A vote of thanks to Dr. Heywood Smith was also passed.

HARVEIAN SOCIETY OF LONDON.—The annual dinner of this society took place at the Café Monico on Nov. 29th, and was attended by considerably over 100 members of the society and their friends. The chair was occupied by the President, Dr. W. H. Lamb. Among the guests were the President of the Royal College of Physicians of London and the Presidents of the Medical Society of London, the Royal Medical and Chirurgical Society, the Pathological Society of London, the Clinical Society of London, the Obstetrical Society of London, the Hunterian Society, and the West London Medico-Chirurgical Society. The toast of the evening, "Success to the Harveian Society," was proposed by Mr. John H. Morgan, President of the Medical Society of London, and acknowledged by the Chairman. Mr. Edmund Owen in a humorous speech proposed "The Sister Societies and Guests," and coupled the toast with the names of Dr. W. S. Church and Dr. F. W. Pavy, who both spoke in reply. The health of the President was proposed by Mr. George Eastes, who referred to the valuable services of Dr. Lamb to the society. A most excellent programme of music and recitations was provided by Mr. Bantock Pierpoint, Mr. Whitworth Milton, and Mr. Frank Braine.

NOTTINGHAM GENERAL HOSPITAL.—The 118th anniversary of this hospital was celebrated on Nov. 29th, when the President, the Mayor, members of the corporation, and governors attended a church service and afterwards assembled in the grand jury room of the Shire Hall for the transaction of general business. The service collection amounted to a little over £1230. The report stated that during the half-year ending June 30th last the number of patients admitted and discharged was as follows:—Admitted: remaining in hospital, Jan. 1st, 1900, 170; accidents, 164; emergencies, 647; by recommendation, 230; total, 1211. Discharged: cured, 265; to the Cedars, 312; to convalescent homes, 10; relieved, 23; made out-patients, 250; at own wish, 30; unsuitable, 23; *in statu quo*, 22; death, 118; remaining in hospital July 1st last, 158; total, 1211. The daily average of in-patients was 170, and the total number of out-patients was 4419, of which casualties numbered 997. The Jubilee Wing was practically completed, and consequent on this an addition of 55 beds had been made to the hospital. The pressure on the hospital for admission had been very great during the half-year, as many as 190 cases having been waiting for beds at one time. The pressure would now be able to be relieved by the extra number of beds. The board, however, wished to draw the attention of the governors to the necessity of increasing the annual income of the hospital. Unless this was done the full benefit of the great efforts made for the erection of the Jubilee Wing would not be secured.

HOSPITAL MINSTRELS.—An entertainment was given by the male staff of Gore Farm Hospital, designating themselves the "Hospital Minstrels," on Thursday, Nov. 29th. The audience comprised male patients and the general staff to the number of 350. An excellent programme was gone through.

INFANT FEEDING.—On the suggestion of Mr. S. Noy Scott, medical officer of health, the Plympton (Devon) Rural District Council resolved, at the meeting held on Nov. 30th, that a leaflet containing simple rules for infant feeding should be distributed by the registrars at the registration of each child's birth.

WATER-SUPPLY OF WADEBRIDGE.—The new waterworks which have been constructed at Wadebridge, Cornwall, were formally opened by Mrs. Ford on Nov. 28th. Mrs. Ford has given the Urban District Council the right to a number of springs from which the water-supply is derived. The reservoir is of 220,000 gallons capacity and the whole scheme has been carried out at a cost of about £6000.

ROYAL UNITED HOSPITAL, BATH.—The annual meeting of the Ladies' Working Association of the Royal United Hospital, Bath, was held on Nov 26th, under the presidency of the Bishop of Bath and Wells. The report showed that during the past year this useful society had provided 1082 articles of the value of over £200, and that consequently the funds of the hospital had not been called upon to provide any linen, blankets, or quilts for the institution.

A DINNER TO SIR GEORGE HARE PHILIPSON.—On Thursday, Nov. 29th, the Southern Branch of the Durham University Medical Graduates' Association entertained Sir George Hare Philipson, the founder of the association, at a complimentary banquet at the Café Royal, Regent-street, London, W. Some 60 members and their friends were present, and letters and telegrams of congratulation, expressing hearty good wishes, were received from all parts of the south of England from members whose engagements prevented their attending to convey personally their felicitations to their old teacher. Dr. F. S. Palmer of East Sheen, vice-president of the association, presided. "The Guest of the Evening" was eloquently proposed by Sir James Crichton-Browne, and modestly acknowledged by Sir George Philipson. The health of "The Visitors" was proposed by Dr. Frederick Spicer and responded to by Sir Walter Foster, M.P. Sir William Turner proposed the health of the chairman, and Sir George Hare Philipson that of the honorary secretary, Dr. T. Outterson Wood.

PRESENTATIONS TO MEDICAL MEN.—Mr. John J. Nason, M.B. Lond., M.R.C.S. Eng., on his resignation after 40 years' official connexion with the Stratford-on-Avon Hospital as an honorary medical officer, is to be presented with a testimonial in recognition of his valuable services to the institution. He has consented to sit for his portrait, which is to be hung in the board-room, and he will be the recipient of an illuminated address, accompanied by a piece of plate.—Mr James Thomas Neech, L.R.C.P. Edin., L.F.P.S. Glasg., D.P.H. Vict., was presented with a dinner-gong on Nov. 7th by his patients and friends at Tyldesley on his leaving the district to take up the duties in connexion with his new appointment at Halifax as a medical officer for the borough.—Mr. Thomas Carter Mitchell, M.R.C.S. Eng., of Topcliffe, Thirsk, Yorks, on the occasion of his resigning his practice to his son, Mr. Talbot Carter Mitchell, L.S.A., and of retiring from active professional life, has been the recipient of a testimonial from the inhabitants of Topcliffe and the surrounding district in recognition and appreciation of his long professional activity amongst them. The testimonial consisted of an illuminated address in a gilt frame, a solid silver salver, and a purse of sovereigns. On the salver was engraved the following inscription:—"Presented by the inhabitants of Topcliffe and district to Thomas Carter Mitchell, Esq., M.R.C.S., F.S.A., on his retiring from the practice so ably and faithfully carried on for forty years. November, 1900."—Dr. E. Magennis of Harcourt-street, Dublin, was recently the recipient of an address and presentation from the medical men resident in the Lurgan Union. The presentation consisted of a Harvard chair for

his consulting-room, which bore on it a silver plate with the following inscription:—"Presented to Edward Magennis, Esq., M.D., J.P., by his fellow practitioners in and around Lurgan and Portadown on the occasion of his leaving for Dublin, as a token of their good fellowship and esteem. September, 1900." The address was signed by every medical man residing in the district.—At Llanelly on Nov. 29th at a meeting of the South Wales Branch of the British Medical Association, Mr. D. A. Davies, M.B. Lond., M.R.C.S. Eng., of Swansea, was the recipient of a testimonial consisting of a tea and coffee service.

CARDIFF INFIRMARY.—An effort is being made in Cardiff to free the infirmary from its debt of over £11,000. The mayor has opened a fund for the purpose and already over £1500 have been received. The *Western Mail* newspaper also has started a "Shilling Fund," which is being well responded to.

THE "BRITISH INSTITUTE OF MENTAL SCIENCE."—Before the Torquay bench of magistrates on Nov. 26th a young woman named Arundel was charged with professing to tell fortunes by palmistry with intent to deceive. Outside the defendant's rooms were printed the letters "F.B.I.M.S.," which her solicitor explained meant "Fellow of the British Institute of Mental Science." The magistrates eventually fined the woman 10*s.* and costs.

A CASE was recently heard in the Court of Queen's Bench before Mr. Justice Wills, in which Dr. Richard Henry Barker, a medical man practising at Hungerford, sued the executors of the late Mr. James Thring Coxe to recover £201 17*s.* 9*d.* for medical attendance and fees paid to a specialist. Dr. Barker had attended Mr. Coxe, who was a man of means, for a period of 20 years. Previously to his death Mr. Coxe had suffered from acute gout and gangrene of one foot. Dr. Barker saw him every morning, for which, he said, his fee was half a guinea, and also, by Mr. Coxe's special request, at 9 o'clock every evening, when he remained with him for between half and three-quarters of an hour. He also had to drive three miles from his own house to Mr. Coxe's residence, and he charged two guineas, besides supplying medicine. The defence was that the charges were excessive and that Mr. Coxe had given Dr. Barker £100 as a present shortly before his death. Mr. Justice Wills gave a judgment for the plaintiff. With reference to the £100 he said that if it were given to diminish the plaintiff's charges it could not be looked upon as a present

# Parliamentary Intelligence.

## NOTES ON CURRENT TOPICS.

*Medical Men in the New Parliament.*

THE Parliament which was opened by Royal Commission on Monday, Dec. 3rd, is not by any means remarkable for the number of medical men it contains. The number is even less than in the preceding Parliament, for while four old faces disappear, there is only a single new one by way of compensation. The newcomer is Mr. F. Rutherford Harris, a gentleman well known in connexion with South African administration and finance, who at the General Election won the seat for the Monmouth District of Boroughs. Mr. Harris is a Licentiate of the Royal College of Surgeons of Edinburgh and some 20 years ago when he was a very young man he went to South Africa to pursue his profession, which he did until other interests grew upon him. The four medical members of the last Parliament who do not appear in the present one are Sir Charles Cameron (Bridgeton Division of Glasgow), Mr. J. F. Fox (Tullamore Division of King's County), Dr. G. B. Clark who was defeated in Caithness-shire by Mr. Leicester Harmsworth, and Sir George Pilkington who was defeated in the Southport Division of Lancashire by Mr. Marshall Hall, Q.C., himself the son of a distinguished physician, the late Dr. Alfred Hall of Brighton. The members of the last Parliament who reappear are Mr. Robert Ambrose, Mr. John Dillon, Dr. Farquharson, Sir Walter Foster, Sir Michael Foster, Mr. R. J. Price, Sir John Batty Tuke, Dr. M. A. MacDonnell, Dr. C. K. D. Tanner, and Sir Robert Finlay, the Attorney-General, who is an M.D. of the University of Edinburgh. With Mr. Rutherford Harris this list makes a total of 11 medical men in the new Parliament. Of the eight members who backed the Midwives Bill of last session there are six in the new Parliament—viz., Mr. Tatton Egerton, Sir William Hart-Dyke, Mr. Schwann, Mr. Heywood Johnstone, Mr. Flower, and Mr. Tennant.

*Opening Proceedings.*

On the opening day of the session the House of Commons devoted its short sitting to the election of a Speaker. The only nomination for this office was Mr. Gully, Q.C., who held it during the last Parliament and a portion of the Parliament preceding. His nomination was seconded by Dr. Farquharson. The second and third days of the session were mainly occupied with the swearing-in of members.

*The Work of the Session.*

The session is a special one, called for the single purpose of voting additional money for the conduct of the war in South Africa. It is therefore not proposed to introduce the ordinary class of Bills, but to reserve them for the normal session commencing early in the New Year. The debate on the Address will, however, afford opportunity for the discussion of prospective legislation.

# Appointments.

*Successful applicants for Vacancies, Secretaries of Public Institutions, and others possessing information suitable for this column, are invited to forward it to THE LANCET Office, directed to the Sub-Editor, not later than 9 o'clock on the Thursday morning of each week, for publication in the next number.*

ASH, T. LINNINGTON, M.R.C.S., L.R.C.P. Edin., L.S.A., J.P., has been appointed Honorary Surgeon in charge of the Winsford Cottage Hospital.

BEALE, H. R., L.R.C.P., M.R.C.S., has been appointed Senior Obstetric House Physician to St. Thomas's Hospital.

BOYD, STANLEY, F.R.C.S., has been appointed Consulting Surgeon to the Paddington Green Children's Hospital, London, W.

BURD, G. VANHOUSE, M.R.C.S., L.R.C.P., L.M. Edin., has been appointed Honorary Assistant Surgeon to the Winsford Cottage Hospital.

BURFIELD, T., M.A., M.B., B.C. Cantab., L.R.C.P., M.R.C.S., has been re-appointed Assistant House Surgeon to St. Thomas's Hospital.

BURGHARD, FREDERIC F., F.R.C.S., has been appointed Surgeon to In-patients to the Paddington Green Children's Hospital, London, W.

BUTTERFIELD, FRANK, M.B. Lond., has been appointed Senior House Surgeon to the Blackburn and East Lancashire Infirmary.

BUZZARD, THOS., M.D. Lond., F.R.C.P., has been appointed one of the Representatives of King's College, London, on the Senate of the University of London, vice Lord Lister, resigned.

CLARKE, H. R., L.R.C.P., M.R.C.S., has been appointed House Physician to St. Thomas's Hospital.

CUNNINGHAM, J. F., L.R.C.P., M.R.C.S., has been re-appointed House Surgeon to St. Thomas's Hospital.

DUDGEON, L. S., L.R.C.P., M.R.C.S., has been re-appointed Clinical Assistant in the Electrical Department at St. Thomas's Hospital.

EDWARDS, T. H., L.R.C.P., M.R.C.S., has been re-appointed Assistant House Surgeon to St. Thomas's Hospital.

HARVEY, FRANK, M.R.C.S., L.S.A. Lond., has been re-appointed Medical Officer of Health by the Padstow (Cornwall) Urban District Council.

HARWOOD, H. M., M.A., M.B., B.C. Cantab., has been re-appointed House Physician to St. Thomas's Hospital.

HAWKINS, C. L., M.A., M.B., B.C. Cantab., L.R.C.P., M.R.C.S., has been re-appointed House Surgeon to St. Thomas's Hospital.

HEDLEY, E. W., M.A., M.B., B.C. Cantab., has been appointed Junior Obstetric House Physician to St. Thomas's Hospital.

HOGARTH, R. G., F.R.C.S. Eng., has been appointed Honorary Surgeon to the Children's Hospital, Nottingham.

JOHNSON, ROBERT G., M.R.C.S., L.R.C.P., has been appointed Registrar and Pathologist to the North London Consumption Hospital, Hampstead, N.W.

KINGDON, E. OWEN, L.R.C.P. Lond., M.R.C.S., has been appointed Honorary Assistant Surgeon to the Winsford Cottage Hospital.

KINLOCH, R. B., L.R.C.P., M.R.C.S., has been re-appointed House Physician to St. Thomas's Hospital.

LEIGH, J. DICKINSON, F.R.C.S. Edin., D.P.H., has been appointed Certifying Surgeon under the Factory Acts for the Scarborough District.

LOCKYER, CUTHBERT, M.D., B.S., M.R.C.P. Lond., F.R.C.S. Eng., has been appointed Honorary Gynæcologist, Plaistow.

MCGREGOR, ROBINA, M.B., Ch.B. Edin., has been appointed House Surgeon to the Victoria Hospital for Sick Children, Hull.

MARTIN, A. E., M.A., M.B., B.C. Cantab., L.R.C.P., M.R.C.S., has been re-appointed House Surgeon to St. Thomas's Hospital.

MENNELL, Z., L.R.C.P., M.R.C.S., has been appointed Assistant House Physician to St. Thomas's Hospital.

NITCH, C. A. R., M.B. Lond., L.R.C.P., M.R.C.S., has been appointed Clinical Assistant in the Special Department for Diseases of the Throat at St. Thomas's Hospital.

SELOUS, C. F. L.R.C.P., M.R.C.S., has been appointed House Physician to St. Thomas's Hospital.

SIDEBOTHAM, G. W., M.R.C.S., has been appointed Certifying Surgeon under the Factory Acts for the Broughton Astley District of Leicestershire.

SIMPSON, ALEXANDER, M.A., M.D. Aberd., has been appointed Medical Superintendent of the New Lancashire County Asylum, Winwick, Newton-le-Willows.

SKERRATT, F. B., B.Sc. Lond., L.R.C.P., M.R.C.S., has been appointed Assistant House Physician to St. Thomas's Hospital.

STABB, EWEN C., F.R.C.S., has been appointed Surgeon to Out-patients to the Paddington Green Children's Hospital, London, W.

STANFORD, W. B., L.R.C.P. Lond., M.R.C.S., has been appointed District Medical Officer for the Hollingbourn Union.

SWAIN, PAUL, F.R.C.S. Eng., L.S.A., has been appointed Honorary Consulting Surgeon to the Winsford Cottage Hospital.

TAKAKI, Y., L.R.C.P., M.R.C.S., has been re-appointed House Surgeon to St. Thomas's Hospital.

TAYLOR, T. S., M.A., M.B., B.C. Cantab., has been re-appointed Assistant House Surgeon to St. Thomas's Hospital.

THOMPSON, C. H., M.D., M.R.C.P., has been appointed Clinical Assistant to the Chelsea Hospital for Women, Fulham-road, London, S.W.

TURNER, J. ANDREW, M.B., C.M. Edin., D.P.H. Camb., has been appointed Executive Health Officer to Bombay.

WILLS, B. S., L.R.C.P., M.R.C.S., has been re-appointed Assistant House Surgeon to St. Thomas's Hospital.

# Vacancies.

*For further information regarding each vacancy reference should be made to the advertisement (see Index).*

BIRMINGHAM AND MIDLAND EYE HOSPITAL, Church-street, Birmingham.—Assistant House Surgeon. Salary £60 per annum, with apartments and board.

BLACKBURN AND EAST LANCASHIRE INFIRMARY.—Junior House Surgeon. Salary to commence at £60 per annum, with board, washing, &c.

BRIGHTON, HOVE, AND PRESTON DISPENSARY.—Three House Surgeons, one for each Branch. Salary £160 per annum, with furnished apartments, coals, gas, washing, and attendance. Apply to Assistant Secretary, 113, Queen's-road, Brighton.

BURY INFIRMARY.—Senior House Surgeon. Salary £100, with board, residence, and attendance. Also Junior House Surgeon. Salary £80, with board, residence, and attendance.

CENTRAL LONDON SICK ASYLUM DISTRICT.—Second Assistant Medical Officer and Dispenser at the Asylum at Hendon for twelve months. Salary £75 per annum, with board and residence, subject to statutory deductions. Apply to the Clerk, Office, Cleveland-street Asylum, Cleveland-street W.

CHESTERFIELD AND NORTH DERBYSHIRE HOSPITAL AND DISPENSARY, Chesterfield.—Resident House Surgeon for two years. Salary £100 per annum, with board, apartments, and laundry.

DERBYSHIRE ROYAL INFIRMARY, Derby.—Resident House Surgeon for twelve months Salary £100 per annum, with apartments and board.

DEVON COUNTY ASYLUM, Exminster.—Junior Assistant Medical Officer. Salary £125, rising £10 annually to £155, with board, furnished apartments, and washing.

DONCASTER GENERAL INFIRMARY AND DISPENSARY.—Assistant House Surgeon. Salary £40 per annum, with board and residence.

DUMFRIES AND GALLOWAY ROYAL INFIRMARY, Dumfries.—Assistant Surgeon. Board and lodging provided.

EAST SUFFOLK AND IPSWICH HOSPITAL, Thorofare, Ipswich.—Two House Surgeons, unmarried. Salary £80 for the senior and £70 for the second, with board, lodging, and washing.

EXPLORATION EXPEDITION TO NORTHERN RHODESIA.—Medical Officer for at least two years. Salary £250 a year, with reasonable expenses. All medical and surgical equipment provided. Apply to Mr. L. Dampier, 30, Clement's-lane, London, E.C.

GENERAL INFIRMARY AT GLOUCESTER AND THE GLOUCESTERSHIRE EYE INSTITUTION, Gloucester.—Assistant House Surgeon for six months. Salary at the rate of £30 per annum, with board, residence, and washing.

GLAMORGAN COUNTY ASYLUM, near Bridgend.—Assistant Medical Officer, unmarried. Salary £150, with board (no beer or wine), lodging, and washing.

GLOUCESTER COUNTY ASYLUM.—Junior Assistant Medical Officer, unmarried. Salary commences at £120 per annum, rising £10 yearly to £150, with board (no stimulants), lodging, and washing.

GREAT NORTHERN CENTRAL HOSPITAL, Holloway-road, N.—Non-resident Assistant House Surgeon for six months. Salary at the rate of £30 per annum, with luncheon and dinner in the hospital.

GUEST HOSPITAL, Dudley.—Assistant House Surgeon, for six months. Salary at the rate of £40 per annum, residence, board, and washing.

HARTLEPOOLS HOSPITAL, 15, Town-wall, Hartlepool.—House Surgeon. Salary £100 per annum, with board, washing, and lodging in the Institution.

HOSPITAL FOR WOMEN AND CHILDREN, Leeds.—Non-resident House Surgeon for six months. Salary at the rate of £125 per annum.

HULL ROYAL INFIRMARY.—House Surgeon for two years, unmarried. Salary 100 guineas per annum, with board and furnished apartments. Also Junior Assistant House Surgeon for one year. Salary £40, with board and lodging.

LIVERPOOL STANLEY HOSPITAL.—Honorary Assistant Physician.

METROPOLITAN ASYLUMS BOARD ASYLUM FOR IMBECILES, at Caterham, Surrey.—Assistant Medical Officer, unmarried. Salary £150 per annum, rising conditionally to £170, with rations, lodging, attendance, and washing, subject to statutory deductions. Forms of application obtained at the office of the Board, Victoria Embankment, London, E.C.

METROPOLITAN BOROUGH OF STEPNEY.—Medical Officer of Health. Salary £750 per annum. Applications to the Acting Town Clerk, Town Clerk's Office, Limehouse Town Hall, Commercial-road, London, E.

MILLER HOSPITAL and ROYAL KENT DISPENSARY, Greenwich-road, S.E.—Junior Resident Medical Officer for six months. Salary at the rate of £60 per annum, with board, attendance, and washing.

NEWCASTLE-UPON-TYNE UNION.—Assistant Medical Officer at the Workhouse, unmarried. Salary £150 per annum, with furnished apartments, rations, and washing, subject to statutory deductions. Applications to the Clerk to the Guardians, Union Offices, Newcastle-upon-Tyne.

NOBLE'S ISLE OF MAN GENERAL HOSPITAL AND DISPENSARY, Douglas, Isle of Man.—Resident House Surgeon, unmarried. Salary £82 per annum, with board and washing free.

NORTHAMPTON GENERAL INFIRMARY.—House Surgeon, unmarried. Salary £125 per annum, with furnished apartments, board, attendance, and washing.

NOTTINGHAM GENERAL DISPENSARY.—Assistant Resident Surgeon. Salary £140 per annum, all found except board.

PADDINGTON INFIRMARY, London.—Clinical Assistant and Second Assistant to the Medical Superintendent for six months, unmarried. Board, lodging, and washing provided, and an honorarium of £36 given conditionally. Personal application to the Medical Superintendent at the Infirmary, Harrow-road, W.

RHONDDA URBAN DISTRICT.—Medical Officer of Health for the district for one year. Salary £500, including travelling expenses. Applications to be made to the Clerk, Public Offices, Pentre (Glam.).

ROYAL COLLEGE OF PHYSICIANS, Pall Mall East, London.—Milroy Lecturer for 1902.

ROYAL EAR HOSPITAL, Soho, London.—House Surgeon (non-resident). Small honorarium given.

ROYAL HANTS COUNTY HOSPITAL, Winchester.—House Surgeon, unmarried. Salary £65 per annum, rising to £75, with board, residence, &c.

ST. MARYLEBONE GENERAL DISPENSARY, 77, Welbeck-street, Cavendish-square, London.—Resident Medical Officer. Salary 100 guineas per annum, rising annually by 10 guineas to 120 guineas, with furnished apartments, attendance, coal, and light.

SALFORD UNION.—Assistant Resident Medical Officer at the Union Infirmary, Hope, near Eccles, for one year. Salary £130, with furnished apartments and attendance (but not rations) in the Infirmary. Apply to the Clerk to the Guardians, Union Offices, Eccles New-road, Salford.

SALVATION ARMY MEDICAL DEPARTMENT.—Honorary Dental Surgeon. Apply to Commissioner Pollard, Chancellor of the International Headquarters, 101, Queen Victoria-street, London.

SEAMEN'S HOSPITAL SOCIETY ("DREADNOUGHT"), Greenwich, S.E.—House Physician for "Dreadnought" Hospital. Salary £75 per annum, with board and residence.

SHEFFIELD ROYAL HOSPITAL.—House Surgeon. Salary £100. House Physician. Salary £75. Unmarried. Board (exclusive of wine and beer), and lodging provided.

SUSSEX COUNTY HOSPITAL, Brighton.—Second House Surgeon and Anæsthetist, unmarried. Salary £70 per annum, with board and residence in the hospital. Also a Third House Surgeon, unmarried. Salary £60 per annum, with board and residence in the hospital, and washing.

THE CHIEF INSPECTOR OF FACTORIES gives notice of vacancies for Certifying Surgeons under the Factory Acts at Durrow, in Queen's County; at Darlington in the county of Durham; and at Bangor in the county of Down.

UNIVERSITY OF GLASGOW.—Examinerships in Medicine. Two additional Examiners for degrees in medicine. The appointment in each case from Jan. 1st, 1901, to Dec. 31st, 1904, at an annual salary of £30.

WARRINGTON INFIRMARY AND DISPENSARY.—Junior Resident House Surgeon. Salary £100 per annum, with furnished residence and board.

WEST KENT GENERAL HOSPITAL, Maidstone.—House Surgeon, unmarried. Salary 100 guineas, rising 10 per annum to 120 guineas, with board and residence. Also Assistant House Surgeon for six months. Honorarium at the rate of £50 per annum, with board and residence.

# Births, Marriages, and Deaths.

## BIRTHS.

BEVEN.—On Dec. 4th, at Balham-hill, S.W., the wife of Octavius Beven, M.D., D.P.H., of a son.

BURGES.—On Nov. 25th, at Hockley-hill, Birmingham, the wife of F. A. l'Estrange Burges, M.R.C.S., L.R.C.P. Lond., of a son.

DAVIES.—On Nov. 30th, at Home Lodge, Great Amwell, the wife of Arthur Templer Davies, M.D. Cantab., F.R.C.P., of a daughter.

MACLEOD—On Dec 2nd, at The Turret, Streatham, S.W., the wife of Herbert W. G. Macleod, M.D., M.S. Edin., D.P.H. Camb. (Surgeon-Captain late H. M.'s Service), of a son.

RUBRA.—On Nov. 23rd, at Cecile-park, Crouch-end, N., the wife of Henry H. Rubra, M.D., M.R.C.S., L.R.C.P., of a son.

## MARRIAGES.

O'KINEALY—TREVOR.—On the 10th of November, at St. Paul's Cathedral, Calcutta, by the Rev. Canon Luchman, Captain F. O'Kinealy, I.M.S., eldest son of J. O'Kinealy, Esq., late Judge of the High Court of Calcutta, to Helen Mabel, only daughter of Rev. Geo. A. Trevor, of Queen's-gardens, London.

STEVENS—JENKINS.—On Dec. 1st, at Llandaff Cathedral, by the Rev. J. R. Buckley, assisted by the Rev. Minor Canon Price, Dr. W. Mitchell stevens, 21, St. Andrew's-crescent, Cardiff, to Annie, only daughter of E. Jenkins, Netherwood, Llandaff.

WALL—FRASER.—On Nov. 12th, at the Cathedral, Cape Town, Charles Percivale Bligh Wall, M.B., Ch.B., of Butterworth, Transkei, Cape Colony, to Emily C. Fraser, youngest daughter of the late A. Fraser, of Island Bank, Inverness, N.B.

## DEATHS.

CARROLL.—On Nov. 27th, at his residence, Lower Leeson-street, Dublin, Deputy Surgeon-General James Carroll, M.R.C.S., M.B. Dubl.

CURRIE.—On Dec. 3rd, at Eastbourne-terrace, Hyde-park, W., Surgeon-General George Vernon Currie, I.M.S., aged 72 years.

HART.—On Nov. 25th, at Wellswood Park, Torquay, in his 67th year, Gratian Charles Barry Hart, M.R.C.S.

SUTHERLAND.—On Nov. 30th, at Pietermaritzburg, Natal, Peter Cormack Sutherland, M.D., F.R.G.S., late Surveyor-General of the Colony of Natal, aged 79.

*N.B.—A fee of 5s. is charged for the insertion of Notices of Births, Marriages, and Deaths.*

# Notes, Short Comments, and Answers to Correspondents.

## THE MEDICAL PROVIDENT LEAGUE.

*To the Editors of* THE LANCET.

SIRS,—I deem it incumbent upon me to request of your courtesy some space in your widely-read columns to enable me to bring before my professional brethren a new movement which I have taken some small part in commencing. For many years past I have felt a deep interest in the various methods proposed, or carried out, for affording provident medical aid to the working classes. Being, fortunately for myself, unconnected with any such work, I have been able to take an impersonal, and therefore independent, view of the facts connected with that work—and may I be permitted to say that those facts have so deeply impressed me that my conscience has constrained me, as I am thankful to know it has constrained others, to steadfastly determine to do all that lies in our power to find and carry out some remedy for a condition of affairs which we feel justified in considering to be deeply discreditable to our profession, gravely detrimental to thousands of medical practitioners, and too often deceptive to the provident poor?

May I briefly give some of the many reasons for that belief?

In every part of the country and to an ever-increasing extent, medical practitioners are being employed by commercial agencies, bent, as is therefore natural, on paying as little to, and getting as much in return from, their doctors as they possibly can. They therefore exploit their doctors' skill and labour; sweat them so that "Jew tailors in the East End of London do not make as much out of their victims" (THE LANCET Report "Battle of the Clubs," p. 43)[1]; overwork them even more and treat them with insult and contempt (p. 108, &c.). It is heart-breaking treatment for an educated, refined man to suffer. Is it not a disgrace to the whole profession that its members should so suffer? Must it not lower the profession in public esteem?

In the next place, when a doctor contracts to attend thousands, or even let us say hundreds, of people, knowing that his average payment per visit and medicine will not be 3*d*.—I prefer to overstate the figure—it is beyond dispute that he cannot make a bare living if he devotes much time and attention to each patient. It is a physical impossibility. It is easy to say that what is worth a guinea cannot be bought for seven farthings (THE LANCET Report "Battle of the Clubs," p. 177), and that the poor cannot expect it. But, then, is it just, is it creditable, to make a contract which cannot be faithfully fulfilled? I know of men who have tried to do their contract work faithfully but broke down in the struggle to achieve the impossible. I doubt not that scores of other men have similarly worked and similarly failed.

It is well known that efforts have been made, but that they have failed, to prevent the growth of the evils of the present system. Councils and colleges have been appealed to—in vain—in the hope that they would make restrictive enactments and thus insure that, if any practitioner resigned a club appointment the conditions of which were inequitable alike to himself and to any sick members, some neighbouring practitioner or some newly-imported—generally newly-qualified—medical man would not instantly take the post in question. This has so often happened in the past that men have openly declared that however ardently they might desire to resign all connexion with medical aid associations it might almost involve them in professional ruin to do so—so completely were they at the mercy of their commercial employers, and so cut-throat was the competition in the ranks of the profession. For reasons which possess much force the authorities appear to have expressed their inability to give any assistance. On the other hand, some local efforts have been made to combat the evil—in rare instances with temporary success, but far more often with failure.

So it has been often suggested that, in the first place, the movement for reform must be central and general, so as to afford, on the one hand, the greater assistance and, on the other, to obviate the chances of local jealousies and friction. In the second place, it has been suggested that such a national union should begin by supporting those provident organisations which already treat their medical officers fairly, and by such support exert a leverage to induce similar organisations to follow the same course. Such a plan seems to be more common-sensible and more easy of fulfilment than to start a new provident organisation under medical control; because the latter would require a very large amount of capital and would involve great business responsibilities and organisation. Accepting these two principles, the working of the various friendly societies was closely investigated, and it became apparent that one of those bodies pursued utterly different methods to most of the others; and methods which appeared to obviate every one of the objections urged against the medical aid associations. This body—the National Deposit Friendly Society—has grown from a small beginning in a little Surrey village into a powerful organisation which is rapidly spreading all over the country, the membership of which is increasing by leaps and by bounds, and which already has a quarter of a million sterling invested. This society *has no contract work*. Each member can consult any medical practitioner he or she chooses. The society has a fixed scale of medical fees and if a medical practitioner accepts this scale the society pays him promptly as soon as his attendance upon the member is concluded. If the medical practitioner does not accept the scale of charges he can arrange with the member, personally, to pay any excess over the specified amount—the society still paying its fixed quota. But it is noteworthy that, in many cases, when special circumstances have been proved the society has generously defrayed the extra fees charged by the practitioner. *No contract work; prompt payments for work actually performed.* Surely these are excellent principles. The society, moreover, has established a sliding scale of fees. Under the Friendly Societies Acts it cannot establish a wage-limit for its members; but it does something better still, because the fees paid to practitioners increase upon a graduated scale according to the amount of sick-pay benefit for which the member subscribes, and which cannot exceed £3 a week. A man receiving £3 a week would have to pay his doctor 5*s*. a visit and medicine for two days—a fee which from a working man will not be condemned as inadequate by any of your readers. A member receiving 30*s*. a week sick-pay in like manner pays 2*s*. 6*d*. per visit and medicine for two days. The society has exhibited its desire to work harmoniously with the medical profession, and from every part of the country a remarkable consensus of opinion is expressed that the methods of working and the payments of this society to medical practitioners deserve professional approval. It appears, therefore, that the National Deposit Friendly Society offers a system which might with much advantage be adopted by medical men throughout the country. It has been publicly stated that the society always welcomes the assistance of medical practitioners in starting branches of the society in districts where such do not at present exist. The society is just about to commence an insurance department for the benefit of its members, and it was suggested that if practitioners willing to attend its members on the scale of fees adopted by the society formed themselves into an organised body the society would be glad to recognise that body officially and to receive from it any complaints or suggestions which the medical officers of the society might desire to make, and which in such a case would be made direct to, and considered by, the governing body of the friendly society. By this means, harmony would be secured, friction and misunderstandings prevented. The views and complaints of any medical officer would go direct to headquarters. As an earnest of their desire for such harmonious working the society offered to give the medical organisation two representatives on its governing body and to accept from the former any recommendations for the appointment of medical referees for the insurance department.

These details having been decided upon in October I addressed a circular on the first of this month to the 1500 practitioners who have in the last year attended members of the society, proposing the formation of a Medical Provident League with certain definite objects, and calling their attention to the above decisions of the National Deposit Friendly Society with the methods of which they were all familiar. Within a fortnight I received nearly 200 applications for membership of the league and many expressions of sympathetic coöperation. I therefore called a meeting of those who had sent their subscriptions, and this was held on Friday, Nov. 23rd, at Exeter Hall. It was unanimously decided to found and carry on a Medical Provident League. A provisional committee was appointed to draw up the necessary by-laws and to summon a meeting of members next May in order to elect permanent officers and a council. The meeting honoured me by electing me as president. The meeting then adopted as the objects of the league the following programme which I had ventured to suggest:—

1. To unite medical practitioners throughout the United Kingdom for their better defence and furtherance of their professional interests.

2. To bring about better arrangements for affording provident medical aid to the working classes.

3. To support such existent provident schemes as are equitable to medical practitioners; and to oppose such schemes as are inequitable in their working or management.

4. To unite and coördinate the personal influence of medical practitioners with individual Members of Parliament, in order to direct the course of any legislation which affects the interests of the medical profession or of the public health.

5. To initiate, or support, schemes incidental to, or conducive to the furtherance of, the above objects.

There are one or two points which perhaps I ought to emphasise. The Medical Provident League will be open to all registered practitioners who desire to improve the conditions of provident medical aid in this country. It will be, of course, absolutely independent of any lay organisation, but it will earnestly advocate and support those organisations—and, to commence with, the National Deposit Friendly Society—which prove themselves willing to treat their medical officers with justice and respect. The League will endeavour to bring about reforms which are urgently needed; it will endeavour to draw practitioners together in a united effort to raise the general conditions of provident work. It appeals to the whole profession to aid it in work which must be of interest and importance to the vast majority of practitioners. The League will doubtless meet with the opposition and abuse which is the accepted reward of every effort at reform; and the cold-water criticism of the superior person who has never experienced the trials and troubles of the general practitioner and whose sympathy with those troubles is very skin deep. It may be long before the League can succeed, but it has already attracted so

much help, it is designed to meet so urgent a need, it is founded upon such principles of justice and professional honour that I cannot but believe that in due time it will attain its objects and will secure the success which I venture to think those objects deserve.

I am, Sirs, yours faithfully,

J. W. J. OSWALD,
President of the Medical Provident League.

Kennington-road, S.E., Nov. 28th, 1900.

## "DOES AN ADVERTISEMENT CONSTITUTE A WARRANTY?"

*To the Editors of* THE LANCET.

SIRS,—Many thanks for sending your issue of present date and calling attention to your notice of our suit against Mr. H. Mott of Oxford, who purchased, by correspondence, one of our five-guinea belts, and not being able to pay the full amount proposed to pay 21*s.* down and the balance in monthly instalments of 21*s.* each. He had the belt just five months, during which time he failed to take any notice of any letters or statements that we sent him until we threatened suit, when he returned the belt, which showed signs from the oxidisation of the wires that he had worn it the whole time and was no doubt benefited by it. When in the witness-box the judge asked him if he doubted the genuineness of the appliance as a producer of electricity and his answer was "that he did not doubt it." Mr. Mott produced no medical certificate to show that he was ill these five months, nor did he show that he, his wife, or any friend could not have returned the belt in a shorter time, but evidently held on to it till suit was threatened and it was a question of parting with four guineas. The judge was evidently prejudiced from the beginning and determined to decide against us although we called the judge's attention to the medical testimony on p. 55 in the inclosed pamphlet and to the standard medical works on p. 72. That we make no claim that our appliances will cure everything we referred the judge to p. 52, No. 17, where we say distinctly the appliances must not be used in cases of fever. That our appliances are beneficial may be proven from the fact that we frequently sell to poor people on the instalment system of 5*s.* weekly, or according to their ability to pay, and that we have never had occasion to sue anyone prior to this case. It is well for us to know that we cannot receive justice in the collection of an account when suit is brought against us, and we shall have to conduct our business accordingly in the future. We may add that we invite medical men as well as electricians to call on us at any time and test our appliances to their entire satisfaction. Trusting you will insert the above in your valuable journal,

We are, Sirs, yours faithfully,

J. L. PULVERMACHER AND CO., Limited
Regent-street, W., Nov. 24th, 1900. (ARTHUR LOWETH, Secretary).

## "THE CASE OF DR. PATRICK QUINLIVAN."

THE following additional subscriptions have been received towards the fund in aid of the wife and family of the late Dr. Patrick Quinlivan:—

| | £ | *s.* | *d.* |
|---|---|---|---|
| Dr. F. J. Smith ... ... ... | 3 | 3 | 0 |
| Mr. Caldwell ... ... ... | 1 | 0 | 0 |
| Mr. C. T. Hirsch (Woolwich) ... ... ... ... | 1 | 1 | 0 |
| Mr. Hugill ... ... ... ... | 1 | 1 | 0 |
| Surgeon-Major H. de Tatham ... ... ... ... | 3 | 3 | 0 |
| Mr. F. St. John Bullen (Clifton) ... ... ... ... | 0 | 10 | 6 |
| Mr. O. A. Wickham ... | 1 | 1 | 0 |
| Dr. M. McCarthy (Warrington) ... ... ... ... | 0 | 10 | 6 |
| Mr. and Mrs. Quinlivan (Cooreclora) ... ... ... | 2 | 0 | 0 |
| Mr. R. Swyer ... ... ... | 1 | 1 | 0 |
| Mr. I. Dorran ... ... ... | 0 | 10 | 6 |
| Mr. S. P. Snook (Weymouth) ... ... ... ... | 1 | 0 | 0 |
| K. W. N. ... ... ... ... | 0 | 5 | 0 |
| Mr. E. T. McDonnell ... | 1 | 1 | 0 |
| Mr. E. H. Niall ... ... | 0 | 10 | 6 |
| Mr. R. Balfour Graham (Levan, Fife) ... ... ... | 0 | 10 | 6 |
| Mr. Ambrose Carney ... | 1 | 1 | 0 |
| Rev. Father Walters ... | 1 | 1 | 0 |
| Dr. Sansom ... ... ... | 1 | 1 | 0 |
| Dr. J. Cotter (Cork) ... | 2 | 0 | 0 |
| Mr. Moynahan ... ... | 1 | 1 | 0 |
| Dr. Sheahan (Portsmouth) ... ... ... ... | 1 | 1 | 0 |
| Dr. Spooner ... ... ... | 0 | 5 | 0 |
| Dr. Bevan ... ... ... | 0 | 5 | 0 |
| Mr. John Mulvany (Portsmouth) ... ... | 1 | 1 | 0 |
| Dr. Lehane ... ... ... | 1 | 1 | 0 |

## PAYING PATIENTS IN HOSPITALS.

AN action was recently brought by Mr. P. J. Hayes, a surgeon of Dublin, against a gentleman farmer named M'Hugh whose leg Mr. Hayes had amputated in the Mater Misericordiæ Hospital in which the surgeon recovered a verdict and judgment for £50. The verdict and judgment have now been set aside upon appeal and entered for the defendant upon grounds which show, if it needed to be shown, that those managing public hospitals should either not admit to their wards persons capable of paying for aid rendered to them or should make it clear to the patient before admission that he will be expected to pay according to his means. It is for those connected with the management to do this rather than the individual member of the staff who may perform the operation. Mr. Justice Murphy, in delivering the judgment of the Queen's Bench Division in the case referred to, pointed out that the defendant, who had been brought from the Roscommon County Infirmary to Dublin by his own wish, was placed in a public ward and there was no evidence while he was in the hospital that any intimation was made to him that he was a paying patient or that he was treated so that he must reasonably know that he should pay or that there was any express contract. Any evidence of admissions of liability related to statements made by the patient's relatives without his authority, whereas he was quite capable of acting for himself. In these circumstances we cannot see that the decision of the court is in any way surprising. Mr. Justice Murphy pointed out that having regard to his means the patient might be acting shabbily but that was not the question which the court had to consider. We are, all of us, accustomed to the "shabbiness" of patients well able to pay who avail themselves of free medical and surgical aid, in hospitals and out of them. Mr. M'Hugh appears to have broken his thigh in a horse accident and to have been brought to Dublin by his own preference; there must, therefore, have been time and opportunity to make it clear that his treatment would not be free, whether he were satisfied with the skill of the surgeons of his own district or preferred to put himself in the hands of those of Dublin. At the same time the medical profession is not one skilled at making bargains, and public opinion is often the only tribunal to which it can appeal when its aid has been distributed gratuitously to those who in other matters would deem themselves insulted if "charitable assistance" were offered to them.

## THE SPECIAL TESTS FOR DRUNKENNESS.

*To the Editors of* THE LANCET.

SIRS,—In a recent case of alleged drunkenness one of the magistrates asked a witness, "Did the doctor in your presence apply any of the special tests for drunkenness?" I should be glad if you could inform me what the special tests for drunkenness are.

I am, Sirs, yours faithfully,

Nov. 28th, 1900. BACCHUS.

*** We know of none. There are certain shibboleths which, if police-court reports are to be trusted, are applied by police surgeons, such as the ability to articulate clearly the words "British constitution" or "literary abilities." Some 25 years ago at Oxford no man was considered to be drunk at a "wine" until he attempted to light a cigar with a fork.—ED. L.

## "MOTOR-CARS FOR MEDICAL MEN."

*To the Editors of* THE LANCET.

SIRS,—I notice that the question of the utility of the motor-car for the practitioner has again cropped up in your columns and that you devote an article to its consideration in THE LANCET of Nov. 17th, p. 1452. I find, too, that it is just about a year ago (THE LANCET, Oct. 28th, p. 1192, and Nov. 18th, p. 1402, 1899) since I addressed some letters to you on the subject. A further year's experience may be of utility to some who are thinking of buying, and in some cases the second year's experience may be of more value than the first. Case in point—I heard of a neighbouring practitioner who bought a motor-car. He was most enthusiastic, told all his friends that it was the best thing going, and that he had saved £90 in the first six months. Within a twelvemonth after he had sold that motor-car, and by the time he had paid his bills for repairs and written off the loss on the sale, I doubt whether this saving was as great as he had reckoned it. At all events, I believe his friends have heard less on the subject lately. To my own experience, then. Since November last my car has been laid up and not available for use pretty nearly as long as it has been in use, but this includes a long spell of last winter when I did not attempt to use it at all, in fact the minute there is a quarter of an inch of mud on the roads half the utility of the car has gone. I am speaking only of a solid tyre car—I know nothing of pneumatics, and after reading the *Autocar* weekly for a year or two do not want to. In fact, if there are two things I would more strongly impress upon my *confrères* than others, after a careful study of motor journals, they would be (1) have nothing to do with any car containing a pump, and (2) have nothing to do with pneumatic tyres. Further, I would say, before buying a car buy the last dozen numbers of the *Autocar*. You will find therein various accounts of journeys with their incidents, mainly pump and tyre, amongst them a very interesting series of papers by the well-known novelist Mrs. Edward Kennard, and in the last of these an interesting snap-shot of the lady on the road with a punctured pneumatic tube in her hand. Imagine this on a round with none too much time to spare. It is the sort of thing that does not matter much when you are out for a fortnight's holiday and your time is your own to spend at Little Pedlington or Slowcum-in-the-Hole, as the case may be; but imagine yourself on the road, getting rather late—bang goes a tyre—and you have to get down, jack up the heavy car, get off the heavy cover of the inner tube, get out tube, repair, replace, pump up. More visits to pay and consulting-room appointments made at home for afterwards! How like you the prospect? Again, it is to be borne in mind that tyres are expensive; while the motive power (petrol) of the car will work out at about 3*d.* per mile, the pneumatic tyres work out at about 2½*d.* per mile.

Only in the current number of the *Autocar*, in reference to the Southsea run noticed by you, Sirs, will be found "by the time appointed for the processional descent of Portsdown Hill and entry into Portsmouth, 80 of the 100 odd cars had arrived." There it is: 20 per cent. failed to arrive at a given place in a given time. Apply the figures to one car and to country practice and there you are. You start out on a round, all goes perfectly well for four journeys, then you have had your 80 per cent. On the fifth journey your car fails to arrive at the time you expected it to. Then you get your 20 per cent. Again, I will say, read Mrs. Kennard's "Cruise of the Sir Charles." You will be able to form some estimate of the frequency and duration (one of them, I think, about five days) of stoppages—no matter at all on a holiday, but simply maddening in medical practice; and bear in

mind that this is a very powerful car, probably not to be bought under £600 or £700. My bills for maintenance of car, as distinct from running it, come to about £43 for the year. To this must be added at least 10 per cent. written off value of car, another £20, and it will be seen that its economy, as compared with horse-keep, is not remarkable. The motor-car is a pleasant hobby, useful on hard and fairly level roads, very little use on muddy roads or in a hilly country; as long as it is in running order it is a great boon in very hot weather, for it is faster and saves knocking one's horses about, but whoever buys a motor-car under the idea that he is going to use it in his practice and economise by giving up horses buys trouble. In addition to maintenance, running expenses, and depreciation a considerable sum must be allowed for hire when the car is unavailable.

A word as to the buying of second-hand cars. On no account buy one second-hand from *anyone* without independent expert advice. I have bought horses from dealers and motors from dealers. Horsedealers have the reputation of being able to look after their own interests, but I should class them as childlike and innocent when compared with certain motor-dealers I have met. At the risk of repeating myself—have nothing to do with pumps; have nothing to do with pneumatic tyres; have nothing to do with common German tyres—insist on Connolly's tyres on *all* wheels of a car, not on driving wheels *only*. Get the best expert advice before you buy; make sure the car will go up the hills in your neighbourhood; and on the whole, do not buy at all unless you only intend to keep it as you would a yacht or a steam-launch, for pleasure mainly—and it may be useful in business. On looking over what I have written I find I have charged nothing on account of "wages," to account of car. This must be added, some portion, at all events, of a man's time, as I fancy the practitioners must be very few who would care to do all the cleaning, lubricating, and oiling for themselves. Altogether I am disposed to advise that a £20 screw, a £20 dog-cart, and annual expenses much the same, will go further in practice than a £200 car.

I am, Sirs, yours faithfully,

Stratford-on-Avon, Nov. 19th, 1900. HARRY LUPTON.

## TRAVEL IN MENTAL DISORDERS.

*To the Editors of* THE LANCET.

SIRS,—The treatment of mental disorders by travel, discussed by the Medico-Psychological Association and reported in THE LANCET of Dec. 1st, p. 1579, is a subject upon which a poet has spoken:—

> "Oh, never let the wretched, if a choice
> Be left him, trust the freight of his distress
> To a long voyage on the silent deep!
> For like a plague will memory break out,
> And in the blank and solitude of things
> Upon his spirit with a fever's strength
> Will conscience prey."
>
> (Wordsworth's "Excursion," Book III.)

I am, Sirs, yours faithfully,

Leek, Dec. 1st, 1900. D. A. ALEXANDER.

## INSTITUTIONS FOR THE GRATUITOUS TREATMENT OF PHTHISIS BY THE OPEN-AIR METHOD.

*To the Editors of* THE LANCET.

SIRS,—I shall be greatly obliged if you or any of your readers can inform me if there are any institutions for the gratuitous treatment of phthisis by the open-air method existing in this country.

I am, Sirs, yours faithfully,

Nov. 27th, 1900. H. H.

## "HAVE MATERNAL IMPRESSIONS ANY EFFECT ON THE FŒTUS IN UTERO?"

*To the Editors of* THE LANCET.

SIRS,—In connexion with the recent article on the above subject in THE LANCET of Nov. 3rd (p. 1266) the following case may be of interest. Mrs. ——, 2-para, was admitted into the Clapham Maternity Hospital on account of ante-partum hæmorrhage. The patient was seven months pregnant and had had attacks of hæmorrhage at irregular and frequent intervals since the third month. Shortly after admission the patient was delivered, the membranes rupturing at the same time, and the entire contents of the uterus being expelled with one pain. The fœtus was deformed as follows. the head and the thorax were apparently normal; the entire abdominal viscera and probably part of the heart were external to the body wall. The pelvis seemed to be normal, but the sex could not be distinguished by external examination. The legs were united by skin and soft tissues in their whole length and were strongly flexed on the child's back, the knees being turned towards the back. Both feet were in a condition of talipes calcaneus. The umbilical cord was represented by a membranous band from one and a half to two inches long, so that any movement of the fœtus must have dragged on the placenta, causing the hæmorrhage. The placenta was very soft and degenerate and was incompletely demarcated, the entire chorion being villous with only small patches of smooth membrane here and there. The heart pulsated for a short time after delivery. There was no history of deformity in the family, the patient's two former children having been well formed, though the elder died during delivery. On questioning the patient, before she knew anything of the condition of the child, the information was elicited that between the second and third months of her pregnancy and before she had had any hæmorrhage she was much impressed by seeing a dog run over in the street, the lower part of the body being completely crushed and "the legs hanging off."

I am, Sirs, yours faithfully,

J. D. GRANGER, M.B., Ch.B. Glasg.,
Resident Medical Officer, Clapham Maternity Hospital, S.W.

Nov. 30th, 1900.

*Joseph H.*—We do not give medical advice. If our correspondent's medical man thinks the condition is one that could be relieved by surgical treatment an application for admission to a hospital might be made. Our correspondent's means, from what he tells us, would not suffice to allow him to pay for the performance of the operation by his family medical man.

*M.B.*—1. "The Outlines of Psychology" and "The Teacher's Note-book of Psychology," both by Professor James Sully. For further information see the Student's Number of THE LANCET, Sept. 2nd, 1899, page 627. 2. There is, we regret to say, no such school.

*Mr. J. Permewan.*—The subject of the purity of beer is dealt with in another column. An account of the manufacture of lager beer at Messrs Allsopp's brewery at Burton appeared in THE LANCET of Nov. 25th, 1899, p. 1462.

*Lex* should consult "Professional Education in the United States," published by the University of the State of New York, at Albany.

*A. J. R. O.*—The notes have been received and we hope to publish them.

*A. A. W.*—We cannot say anything definite yet.

## METEOROLOGICAL READINGS.

*(Taken daily at 8.30 a.m. by Steward's Instruments.)*

THE LANCET Office, Dec. 6th, 1900.

| Date | Barometer reduced to Sea Level and 32° F. | Direction of Wind. | Rainfall | Solar Radiation Vacuo. | Maximum Temp. Shade. | Min Temp | Wet Bulb | Dry Bulb | Remarks at 9.30 A.M. |
|---|---|---|---|---|---|---|---|---|---|
| Nov. 30 | 29·64 | N. | ... | 68 | 48 | 44 | 43 | 44 | Cloudy |
| Dec. 1 | 29·66 | E. | 0·01 | 47 | 46 | 44 | 44 | 45 | Raining |
| ,, 2 | 29·79 | E. | 0·02 | 47 | 44 | 42 | 42 | 44 | Overcast |
| ,, 3 | 29·90 | SSE | ... | 55 | 54 | 42 | 41 | 43 | Overcast |
| ,, 4 | 29·51 | W. | 0·06 | 78 | 56 | 43 | 51 | 53 | Stormy |
| ,, 5 | 29·57 | WSW | 0·09 | 58 | 56 | 52 | 51 | 52 | Raining |
| ,, 6 | 29·74 | W. | 0·56 | 59 | 53 | 49 | 48 | 50 | Cloudy |

# Medical Diary for the ensuing Week.

## OPERATIONS.

### METROPOLITAN HOSPITALS.

**MONDAY (10th).**—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), St. George's (2 P.M.), St. Mary's (2.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), Chelsea (2 P.M.), Samaritan (Gynæcological, by Physicians, 2 P.M.), Soho-square (2 P.M.), Royal Orthopædic (2 P.M.), City Orthopædic (4 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M.).

**TUESDAY (11th).**—London (2 P.M.), St. Bartholomew's (1.30 P.M.), Guy's (1.30 P.M.), St. Thomas's (3.30 P.M.), Middlesex (1.30 P.M.), Westminster (2 P.M.), West London (2.30 P.M.), University College (2 P.M.), St. George's (1 P.M.), St. Mary's (1 P.M.), St. Mark's (2.30 P.M.), Cancer (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M. and 6 P.M.), Royal Ear (3 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.).

**WEDNESDAY (12th).**—St. Bartholomew's (1.30 P.M.), University College (2 P.M.), Royal Free (2 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), King's College (2 P.M.), St. George's (Ophthalmic 1 P.M.), St. Mary's (2 P.M.), National Orthopædic (10 A.M.), St. Peter's (2 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.), Gt. Ormond-street (9.30 A.M.), Gt. Northern Central (2.30 P.M.), Westminster (2 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), Cancer (2 P.M.)

**THURSDAY (13th).**—St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.) University College (2 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), London (2 P.M.), King's College (2 P.M.), Middlesex (1.30 P.M.), St. Mary's (2.30 P.M.), Soho-square (2 P.M.), North-West London (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (Gynæcological, 2.30 P.M.), Metropolitan (2.30 P.M.), London Throat (2 P.M.), St. Mark's (2 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.).

**FRIDAY (14th).**—London (2 P.M.), St. Bartholomew's (1.30 P.M.), St. Thomas's (3.30 P.M.), Guy's (1.30 P.M.), Middlesex (1.30 P.M.), Charing-cross (3 P.M.), St. George's (1 P.M.), King's College (2 P.M.), St. Mary's (2 P.M., Ophthalmic 10 A.M.), Cancer (2 P.M.), Chelsea (2 P.M.), Gt. Northern Central (2.30 P.M.), West London (2.30 P.M.), London Throat (2 P.M. and 6 P.M.), Samaritan (9.30 A.M. and 2.30 P.M.).

**SATURDAY (15th).**—Royal Free (9 A.M. and 2 P.M.), Middlesex (1.30 P.M.), St. Thomas's (2 P.M.), London (2 P.M.), University College (9.15 A.M.), Charing-cross (2 P.M.), St. George's (1 P.M.), St. Mary's (10 P.M.), London Throat (2 P.M.).

At the Royal Eye Hospital (2 P.M.), the Royal London Ophthalmic (10 A.M.), the Royal Westminster Ophthalmic (1.30 P.M.), and the Central London Ophthalmic Hospitals operations are performed daily.

## SOCIETIES.

**MONDAY (10th).**—SOCIETY OF ARTS.—8 P.M. Prof. J. A. Fleming: Electric Oscillations and Electric Waves. (Cantor Lecture.)

MEDICAL SOCIETY OF LONDON.—8.30 P.M. Dr. F. de Havilland Hall: The Diagnosis and Treatment of Thoracic Aneurysm. (Adjourned Discussion, with special reference to Treatment by Injection.)—Mr. A. Doran: Painless Calculous Pyonephrosis without Fever, Nephrectomy, Recovery.

**TUESDAY (11th).**—ROYAL MEDICAL AND CHIRURGICAL SOCIETY (20, Hanover-square, W.).—8.30 P.M. Dr. Manson: A Brief Resume of the Recent Advances in the Parasitology of Malaria.—Dr. Sambon and Dr. Low: An Account of the Experiments conducted on behalf of the Colonial Office and the London School of Tropical Medicine in the Campagna and in London.—Dr. Rees: Demonstration of the Human and Mosquito Cycles of the Malaria Parasite and of the Anatomy of the Mosquito.

**WEDNESDAY (12th).**—HUNTERIAN SOCIETY (London Institution, Finsbury circus).—8 P.M. Council Meeting. 8.30 P.M. Papers.

SOCIETY OF ARTS.—8 P.M. Prof. F. Clowes: The Treatment of London Sewage.

**THURSDAY (13th).**—OPHTHALMOLOGICAL SOCIETY OF THE UNITED KINGDOM.—Clinical Evening. 8 P.M. Cases and Card Specimens. 8.30 P.M. Mr. J. H. Fisher: Case of Congenitally Imperfect Separation of Iris from Back of Cornea.—Mr. W. T. Lister: Large Dermoid Growth of Cornea in the Eye of an ox.—Mr. G. B. James: (1) Rare Example of Persistent Pupillary Membrane; (2) Large Pigmented Area below Disc, probably of the nature of a Coloboma.—Mr. A. S. Morton: Growth on Cornea.—Mr. F. Fergus: A Case showing an Easy Operation for Ptosis.

CHILDHOOD SOCIETY (Library of the Sanitary Institute, 72, Margaret-street, W.).—8 P.M. Mrs. D. Colman, M.D. Lond.: Causes of Failure in the Health of School Girls.

BRITISH GYNÆCOLOGICAL SOCIETY (20, Hanover-square, W.).—8 P.M. Specimens will be shown by Mr. F. Jordan, Mr. B. Jessett, and Dr. H. Snow. Papers:—Dr. Elder: Some Unusual and Interesting Abdominal Cases.—Dr. Hodgson: Circulatory Phenomena as a Sequela of the Pregnant Uterus.

**FRIDAY (14th).**—EPIDEMIOLOGICAL SOCIETY OF LONDON (11, Chandos-street, Cavendish-square, W.).—8.30 P.M. Meeting.

CLINICAL SOCIETY OF LONDON (20, Hanover-square, W.).—8.30 P.M. Papers:—Dr. Tyson: A Case of Ankylostomiasis.—Dr. Calvert: A Case of Hæmatoporphyrinuria.—Dr. J. Fawcett and Mr. Steward: A Case of Pneumococcal Suppurative Pericarditis treated by Incision and Drainage.—Mr. W. G. Spencer: Bursæ filled with Concretions of Urate of Soda in a Case of Gonorrhœal Rheumatism.

BRITISH BALNEOLOGICAL AND CLIMATOLOGICAL SOCIETY (20, Hanover-square, W.).—8.30 P.M. Paper:—Dr. Wardell (Potter's Bar): The Suppression of Malaria. (The Fellows will dine together at Verrey's Restaurant, Regent-street, W., at 6.45 P.M.)

## LECTURES, ADDRESSES, DEMONSTRATIONS, &c.

**MONDAY (10th).**—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. J. Galloway: Consultation. (Skin.)

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Mr. L. A. Bidwell: The Preparations before Abdominal Operations.

**TUESDAY (11th).**—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Dr. H. Campbell: Consultation. (Medical.)

THE HOSPITAL FOR DISEASES OF THE SKIN (Stamford-street, Blackfriars).—5 P.M. Clinical Lecture:—Dr. C. F. Marshall: Tertiary Syphilides.

**WEDNESDAY (12th).**—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. R. W. Roughton: Consultation. (Surgical.)

HOSPITAL FOR CONSUMPTION AND DISEASES OF THE CHEST (Brompton).—4 P.M. Dr. Perkins: The Diagnosis of Incipient Pulmonary Tuberculosis.

THE SANITARY INSTITUTE (Parkes Museum, Margaret-street, W.).—8 P.M. Discussion on Some Practical Aspects of the Plague at Sydney (with illustrations). Opened by Dr. F. Tidswell. Among others who are expected to attend are Dr. H. T. Bulstrode, Mr. J. Cantlie, Dr. W. Collingridge, Mr. A. W. Harris, Dr. R. T. Hewlett, Dr. H. F. Parsons, and Mr. S. M. Kaka.

**THURSDAY (13th).**—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—4 P.M. Mr. J. Hutchinson: Consultation. (Surgical.)

THE HOSPITAL FOR SICK CHILDREN (Gt. Ormond-street, W.C.).—4 P.M. Dr. Still: Jaundice in Children.

WEST LONDON POST-GRADUATE COURSE (West London Hospital, W.).—5 P.M. Mr. L. A. Bidwell: The Treatment after Abdominal Operations.

CHARING-CROSS HOSPITAL.—4 P.M. Mr. Gibbs Surgical Cases. (Post-graduate Course.)

LONDON TEMPERANCE HOSPITAL.—2 P.M. Dr. S. Fenwick: Clinical Demonstration.

**FRIDAY (14th).**—MEDICAL GRADUATES' COLLEGE AND POLYCLINIC (22, Chenies-street, W.C.).—2-3.30 P.M. Dr. J. Taylor: Class. Clinical Examination of the Nervous System. 4 P.M. Mr. T. Collins: Consultation. (Eye.)

## EDITORIAL NOTICES.

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